believe in co-educational sexuality education classes. Of the respondents, 80.5% would include sexual values in a program, while 92.8% would include birth control information.

Neither teacher age, nor years of teaching experience had an effect on attitude toward teaching sexuality education, willingness to teach sexuality education or perception of preparedness to teach sexuality education. Level of teacher education does not affect attitude toward teaching sexuality education or perception of preparedness to teach sexuality education but does affect willingness to teach sexuality education. Those teachers with a more advanced level of education, (i.e., Masters Degree, Table 15, p. 50), reported a higher mean score on the subscale "Willingness to Teach Sexuality Education" than those teachers having a Teaching Certificate. School size does not affect willingness to teach sexuality education, but definitely affects attitudes toward sexuality education. Those teachers teaching in schools with over 1,000 students exhibited a higher mean score on the subscale "Attitudes Toward Sexuality Education," than did those in schools of 500 - 1,000 students (Table 11, p. 45). Both attitude toward sexuality education and willingness to teach sexuality education were affected by grade level taught. Those teachers in a senior high school (10 - 12) had a more positive attitude toward sexuality education, as indicated by a higher mean score on the subscale "Attitudes Toward Sexuality Education" than did those who taught at junior high (7 - 9). Those reported teaching senior high scored higher on the "Willingness to Teach Sexuality Education" subscale than did those teaching junior high (Table 12, p. 47). When colleagues, school administration and community were believed to support sexuality education the teachers in this study showed more willingness to act on that belief (Table D-8 to D-10, Appendix D). Multivariate analysis would have been useful at this point in explaining relationships more precisely.

Sexuality education concepts home economics teachers strongly believe should be taught included areas like interpersonal relationships, personal development and decision-making while they strongly disagreed with teaching concepts like homosexuality, abortion and incest. Comparison of "should teacher" and "actually teach" concepts found a strong relationship between belief and actual teaching, with those concepts rated highly actually taught more frequently. The area of teacher specialization did not affect attitude toward teaching sexuality education, belief which concepts should be taught and the actual teaching of these concepts. However, those teachers with a family studies background, showed higher mean scores on the subscales "Willingness To Teach Sexuality Education" and "Perception of Preparedness To Teach Sexuality Education" indicating more willingness to teach sexuality education and a better preparedness to teach sexuality education than those in other areas of specialization. Nova Scotia home economics teachers are concerned with support for sexuality education programs, with value issues in sexuality education, with lack of resources, and recognize the need for special training when teaching sexuality education.

Attitudes Toward Sexuality Education

For Fishbein and Ajzen (1975), attitudes are important and may be used to guide or influence behavior. If their theory of "reasoned action" is applied to sexuality education it may be used to predict, explain and influence human behavior related to sexuality education. Using the Ajzen and Fishbein (1980) model to the extent that (a) sexuality education behavior is influenced by behavioral intentions, and (b) intentions are influenced by attitudes toward teaching sexuality education and by perceptions of significant others' opinions regarding sexuality education behavior, it may be used to predict, explain and influence the response of teachers involved in implementing sexuality education programs.

If it is known that 95.4% of home economics teachers reported a favorable attitude toward sexuality education (Item 5 of the TSE Questionnaire) and that attitude as reported by the subscale "Attitude Toward Sexuality Education" is not affected by age, teacher education or years of teaching experience, but is affected by school size and grade level taught, then these factors may be used as predictors toward a teacher's intention to teach sexuality education. A conclusion may be drawn that since 95.4% reported a favorable attitude, home economics teachers are likely to be involved in sexuality education and that those teaching either senior high school students or in larger schools are more likely to teach sexuality education than other home economics teachers. If 91.2% disagreed with the statement that sexuality education leads to promiscuity (Item 4 of the TSE Questionnaire) this may be judged as exhibiting a positive attitude toward the effects of sexuality education and could be used as one of the attitudinal components of Ajzen and Fishbein's theory.

A second predictor of the intention to teach sexuality education is the influence of significant reference person's opinions regarding sexuality education. Ajzen and Fishbein (1980) believe that the relationship between belief that specific individuals or groups think a behavior should be performed and the motivation to comply with the reference persons (the subjective noun) are part of the intention to perform a specific behavior. In this study when the relationship between these two variables was tested by chi-square analysis there was a significant relationship between perceived support for sexuality education by colleagues, school administration and community and willingness to act on that support. In other words, when the home economics teachers surveyed perceived support for the teaching of sexuality education by significant referents, in this case colleagues, school administration and the community, they were willing to act on that perceived support. Boyd (1981) also found that when Iowa home economics teachers felt competent to teach sexuality education and perceived school-district support for sexuality education, they were likely to give more teaching emphasis to sexuality topics than other teachers. If a teacher is inhibited in the intention to teach sexuality education by a fear that a significant referent might disapprove of the teaching of sexuality education, this might influence the implementation of effective sexuality education programs. Only 65.9% of respondents in this study reported a school administration supportive of sexuality education. Perception of limited support for sexuality education in their schools from school administration, colleagues and community was reported by Boyd (1981) who suggested that teachers feared possible negative sanctions from these sources if they were to give more emphasis to sexuality education topics in their classroom. The low response rate to Questions 19, 20 and 21 of the TSE Questionnaire (see Table 17) regarding belief in referents thinking that sexuality education should be taught, might indicate the non-existence of a school board policy regarding sexuality education or the fact that teachers are unaware of the expectations for teaching sexuality education. Consequently, community support for sexuality education programs whether positive (Monk, 1984) or negative (Steinbacher, 1984) and the support or lack of it by school administration will have a role to play in teacher acceptance of such programs.

For Allgeier (1983) the attitude toward the act and the subjective norm, the determinants of intention, and hence behavior have been broken down by Fishbein into "basic psychological components that are amenable to change" (p. 197). If these components of Ajzen and Fishbein's model are open to change then sexuality education curriculum implementators who wish positive results from their programs would do well to understand the attitudinal and normative factors which influence the intention to teach sexuality education. An understanding of these factors could lead to the prediction of the outcome of a sexuality education program.

Because teacher attitude is such an important factor in predicting behavior one of the advantages of using the Ajzen and Fishbein theory of "reasoned action" as a conceptual framework is that it will allow curriculum planners to identify influences on the teaching of sexuality education. Since this theory is based on the premise that humans are rational and will "make systematic use of the information available to them" (Ajzen & Fishbein, 1980, p. 5), identification of those factors - both attitudinal and normative - influential in sexuality education is important. An understanding of how educators make use of the information available to them regarding sexuality education may be used to predict, explain and influence their behavior. In using the Ajzen and Fishbein theory as a conceptual framework this study attempts to provide a model which will allow curriculum planners an understanding of relevant factors in sexuality education.

Teaching Sexuality Education

Support for teachers feeling inadequately prepared to teach sexuality education as cited in the literature (Elkin, 1971; Evenson, 1973; Bower, 1974; Ryan & Dunn, 1979) was found in this study where only 64.4% of respondents felt personally ready to teach sexuality education. However 80.4% of the teachers were willing to teach sexuality education and 68% had taken a course in human sexuality. The Nova Scotia survey was similar to a Canadian national one where 76% of 782 family life education teachers reported comfort in teaching the topic with 53% reporting previous family life education training and only 11% of these courses in human sexuality (Nolté, 1984).

On the subscale "Perception of Preparedness to Teach Sexuality

Education" where respondents rated their readiness to teach sexuality education a ranking of the top four items reveals that the teachers surveyed felt more prepared to teach fetal development, female reproduction, the fertility cycle and health care during pregnancy. Those items receiving a lower rating in perception of preparedness to teach involved abortion, sexual orientation or lifestyle and sexually transmitted diseases. In a study of home economics majors' perception of preparedness to teach human sexuality, Rasco et al. (1984) found that perceived preparation was significantly higher in the cluster of sexuality education concepts designed as "pregnancy".

When respondents to this study ranked those sexuality education concepts they taught most frequently (Table 21) one-third of the first 15 dealt with female biology or pregnancy while the others could be grouped together under the heading of interpersonal relationships. A study by Hughes and Doughtery (1977) revealed that over 90% of home economics teachers who were teaching human sexuality most commonly presented it within the context of child development or family relations courses. The emphasis on pregnancy and prenatal development may be explained by the occurrence of sexuality education within a child development class.

For Koblinsky et al. (1985) a positive relationship exists between willingness to teach and a perceived and objectively measured knowledge of human sexuality. Those who reported specializing in the area of family and consumer studies were significantly more prepared to teach sexuality education than those specializing in other areas, especially clothing and textiles. Rasco et al. (1984) reported that college courses in family relations, child development and the biological sciences were closely related to better preparation to teach sexuality education concepts. Respondents to this study stated that family life institutes, anatomy, biology, psychology, child studies, human sexuality and human relations courses as beneficial to their preparation to teach sexuality education. If this and other studies are an indication, then home economics teachers reported themselves as well prepared to teach these aspects of sexuality education which are female intensive such as pregnancy and female reproduction and have chosen courses or programs which help prepare them for such.

Many teachers do not have a choice about the area of home economics they teach within a school system. Both willingness to teach sexuality education and preparedness to teach sexuality education were significantly affected by the area of educational specialization within home economics. Considering that those with a specialist home economics background in clothing and textiles did not perceive themselves as well prepared to teach sexuality education as those with a family and consumer studies background, the need for pre-service and in-service sexuality education is apparent. Several studies state that one of the items ranked highly as belief and actual teaching among the sexuality education concepts is nutrition during pregnancy. Teachers are teaching that which is non threatening and that about which they feel knowledgeable and comfortable. If sexuality education is to encompass sexuality in its broadest terms and not be limited to biology, then teachers must be made aware of the comprehensive nature of the course.

If sexuality education as taught by home economics teachers tends to be female intensive with a greater degree of comfort shown with teaching topics with a female orientation, then the concern shown for working with co-educational classes may be understood. Historically home economics programs in Nova Scotia have not been co-educational and this might be reflected in the anxiety expressed by the respondents in dealing with teaching sexuality education in a co-educational setting. Belief in co-educational classes in sexuality education was positive for only 60.8% of respondents and concern was demonstrated by these comments to the open-ended questions: "girls have difficulty discussing topic(s) when boys are present" and "extra tension with a co-ed . . . I feel segregated either sex is better to allow students to be comfortable with our developing sexuality." This concern was especially noted for junior high students but was counteracted with "I only teach the girls, I wish I had access to the male population" and numerous requests for co-educational classes, especially at the senior high level. This polarization was reported by Herold and Benson (1979) where some teachers felt discussion was more honest in single sex classes and others wanted co-educational classes so that views of both sexes could be expressed. Schultz, Boyd and Fanslow (1983) reported home economics teachers at a workshop on sexuality education as unsure of their comfort when teaching sexuality to students of the opposite sex.

Belief in what sexuality education concepts should be taught and the actual teaching of these concepts closely parallel each other. When a comparison is made between those ranked of both high and low importance for "should teach" and "actually teach" concepts, there are almost identical positions for the top and bottom placements. Of the top 11 ranked concepts which home economics teachers believe should be taught, eight are actually being taught: relationships, self-concept, nutrition during pregnancy, accepting responsibility for behavior, values formation/clarification, decision-making, communication and feelings/emotions (Table 23). Ten of the 11 bottom ranked "should teach" concepts share a placement with the actual teaching of these concepts: sexual harrassment, rape, abortion, intercourse, sex bias, incest, pornography, homosexuality, sexual response and masturbation (Table 23). The conclusion which must be reached is that teachers actually teach what they believe should be taught. Although a chi-square test for a significant relationship between "should teach" and "actually teach" led to a rejection of the relationship because there were too many empty cells to draw a conclusion, a comparison of the means of the 45 sexuality education concepts (Figure 2) and of the ranking of the concepts for "should teach" and "actually teach" illustrates many similarities. Chamberlain et al. (1987) compared home economics teachers rating of 52 human sexuality concepts as to importance and actual inclusion in the curriculum and found that five of the top ten rated as important for inclusion in a human sexuality program were being taught while five of the ten concepts rated as least important were taught by the smallest number of teachers. A result of Chamberlain's study was that these concepts rated highly were judged as more factual than other concepts related to human sexuality and those lowest rated concepts were actually excluded from the secondary home economics curriculum because of lack of relevance for human sexuality education.

One of the results of the rating of sexuality education concepts by participants in this study was the ranking of concepts related to self-development (relationships, self-concept, decision-making) or female growth and development (prenatal nutrition and development, female reproduction) above concepts which were more controversial (homosexuality, abortion) in both the belief in teaching and actual teaching. When Texas home economics teachers ranked 52 human sexuality concepts, Chamberlain et al. (1983) concluded that human sexuality as taught by Texas home economics teachers was female-intensive because those concepts ranked as most important and most frequently taught were female related (involving some aspect of pregnancy) and those ranked as least frequently taught were more relevant for males (involving sex offenses, male puberty and contraceptive use).

Similar results were found by Schultz et al. (1983) when they surveyed home economics teachers prior to a workshop in sexuality education. The teachers perceived themselves as generally knowledgeable about the female reproductive system, health care during pregnancy, sexually transmitted diseases, fetal development, sexual health and the fertility cycle but wanted more information on drugs and male reproduction. The teachers felt it important to include sexual values but were apprehensive about including sensitive sexual topics.

Home economics is a field which has traditionally attracted female participants. In this survey 98% of respondents were female and the majority reported training in the area of home economics. This may account for fetal development, female reproduction, the fertility cycle and health care during pregnancy, mainly female orientated issues, receiving a high rating in terms of "perception of preparedness to teach." The preference shown by teachers in this study as evidenced by their selection of "should teach" and "actually teach" sexuality education concepts and their perception of preparedness to teach those areas which are female intensive was reinforced by a survey respondent who wrote "I am not comfortable with (the) topic beyond birth control, pregnancy, child care, sexual health."

If sexuality education curriculum planners include concepts which they believe have a strong theoretical basis for placement in the curriculum and those teachers implementing the program do not share their belief, the indications are, from this and previous research, that these concepts will not get taught. When Moeller (1982) questioned teachers over who decides the curriculum, there was unanimous agreement that the teachers had the most control over what they taught although other factors such as state guidelines, teacher contacts, workshops, the school district and parents and student suggestions were somewhat influential.

Data revealed for Yarber and McCabe (1981) that "teacher's attitudes toward sexuality are the most important personal factor influencing the inclusion of topics" (p. 290) in a program of sexuality education. Teacher attitudes toward the inclusion of value-laden or controversial topics such as birth control, homosexuality or abortion, are not evidenced as positive by the low value granted them by respondents to this and other studies. Although 92.8% of respondents in this study believed that birth control should be included in a sexuality education curriculum, it was ranked as twenty-third out of 45 sexuality education concepts actually taught. Stern and Keislar (1977) linked a background in subject knowledge to a more positive attitude toward the subject, while Plonsky (1978) found that a positive attitude toward contraceptive education was specifically linked to adequate birth control knowledge. The influence of significant referents were according to Ajzen and Fishbein (1980) an important factor in whether a behavior is performed. Therefore the perceived limited support of school administrations (65.9%) might mean that teachers are less likely to teach controversial sexuality education topics because of their potential for trouble and the fact that negative sanctions might be received for teaching these concepts.

Respondents to this study were willing to not only teach physiological facts but believe sexual values should be taught as well. Judged by respondents choice of sexuality education concepts in the curriculum, most were reluctant to discuss the more controversial concepts with their students. Therefore, if curriculum planners deem inclusion of the concepts necessary in a sexuality education program, they must recognize the need for additional preparation to help provide teachers with strategies for dealing with those less selected sexually education concepts.

The Dilemma of Values

Noble (1986) reports one of the seven inhibiting factors in the provision of sexuality education programs as "confusion over rapid changes in sexual values" (p. 21). The dilemma faced by teachers in this study over the issue of values education within sexuality education is evident. Although 80.5% of respondents would include sexual values in the curriculum (Item 11, TSE Questionnaire) the concern is about what value stance, if any, to take. The predicament teachers face in sexuality education is illustrated by these conflicting responses to the open-ended question: "moral values must be an issue" and a "teacher must pass on facts, not personal values." In an interview study with 24 home economics teachers Moeller (1982) reports that "teachers see their role in helping students in their judgment and decision-making ability" and this is how "they can implement moral education without inflicting their own moral values upon the students they teach" (p. 156). Perhaps, for teachers in this study, this explains the dilemma when they rated highly the teaching concepts of like decision-making and setting personal standards and gave a lower ranking to the importance of teaching such concepts as incest and abortion. In a study of Texas home economics teachers Chamberlain et al. (1983) concluded that value-laden and therefore controversial concepts like abortion, contraceptive use and emotions related to intercourse, were among those least frequently taught.

Noble (1986) believes that the issue of values and decision-making must be addressed and careful consideration must be given to the incorporation of values in a sexuality education program. For Gilgun and Gordon (1983) sexuality education cannot be taught in a value-free context and "at its heart sex education is moral education and . . . values will be part of the process" (p. 29). If sexuality education is to reflect a value stance, then this fact and the dilemma faced by teachers deserves important consideration by curriculum planners. If the principle of human equality as suggested by Gilgun and Gordon (1983), were to form the basis for sexuality education then this would provide a framework for the discussion of controversial concepts such as homosexuality, abortion and masturbation. As these concepts tend to be the ones avoided by the subjects of this and other studies provision of a moral framework which will allow for a range of points of view might make sexuality education a topic less avoided or dreaded by teachers.

Summary

In summary the majority of the home economics teachers in this study reported a favorable attitude toward sexuality education and were willing and prepared to teach it. Neither attitude toward teaching sexuality education, willingness to teach sexuality education or perception of preparedness to teach sexuality education was affected by age or years of teaching experience. Level of education did not affect attitude toward sexuality education and perception of preparedness to teach sexuality education but did affect willingness to teach sexuality education. Those teachers reporting a more advanced level of education recorded a higher mean sore on the subscale "Willingness to Teach Sexuality Education." School size has no affect on willingness to teach sexuality education but those teachers in larger schools reported a higher mean score on the subscale "Attitudes Toward Sexuality Education." Grade level taught affected both attitude toward sexuality education and willingness to teach sexuality education. Senior high school teachers reported a higher mean score on both subscales: "Attitude Toward Sexuality Education" and "Willingness to Teach Sexuality Education."

Home economics teachers in this study strongly agree with teaching concepts areas like interpersonal relationships, personal development and decision-making and strongly disagreed with teaching concepts like homosexuality, abortion and incest. A strong relationship existed between those concepts home economics teachers believe should be taught and those they actually teach. As well, when survey respondents believed that colleagues, the school administration and the community supported the teaching of sexuality education, they were willing to act on that belief. Those teachers reporting a background in family and consumer studies scored higher mean scores on the subscales "Willingness to Teach Sexuality Education" and "Perception of Preparedness to Teach Sexuality Education."

The dilemma of values in sexuality education, of support for sexuality education programs, and lack of resources, were seen as concerns of the home economics teachers.

CHAPTER VI

Implications and Recommendations for Research

Implications for Research Findings

Because the Ajzen and Fishbein model of "reasoned action" was not fully employed in this study, further research should be carried out to determine the salient beliefs held by sexuality educators which help determine their attitude toward sexuality education. If this theory will allow us to predict, explain and influence human behavior, in this case teaching sexuality education, knowledge of the beliefs which influence attitudes would be important for those who are designing and implementing sexuality education curriculum. The influence of the subjective norm (those relevant others such as school administration or community) should be further examined, because research has shown that motivation to comply with what relevant others believe should be done is an important factor in the intention to teach sexuality education. This implies that, for sexuality education curriculum implementors, an important consideration must be the knowledge of the school board and community attitude toward sexuality education and the recognition that this might influence the behavior of those selected to teach the course. If a set of attitudinal and normative considerations regarding the teaching of sexuality education were identified, then a more accurate representation of the Ajzen and Fishbein model could lead to a more conclusive narrowing of the factors which are instrumental in the behavior of teaching sexuality education.

Because a relationship was found between belief in which concepts should be taught and the actual teaching of these concepts, curriculum planners must give serious consideration to those concepts teachers believe should or should not be taught. The reasons for the lack of emphasis given to some sexuality education concepts deserves further consideration. Was this low emphasis due to lack of knowledge of the concept, to less comfort in teaching the concept, or lack of support for the teaching of this concept? If teachers are going to include in a sexuality education curriculum only those concepts they believe should be taught, then curriculum planners must carefully consider those concepts they include in their program. Perhaps those low ranked concepts are not relevant for inclusion in a sexuality education program and should be excluded or further work must be done preparing the teachers to teach those less chosen concepts.

This study did not attempt to rate the teacher's knowledge of sexuality education concepts, only their perception of preparedness to teach. Although most teachers perceived themselves as prepared to teach sexuality education, further research could explore whether those teachers who rated selected sexuality education concepts as higher than others, are more knowledgeable about these concepts.

Considering the dilemma reported by teachers in this study regarding the teaching of values in sexuality education curriculum, planners must be very specific in their course outline about value related issues and must be prepared to help those teachers administering the program. An essential area for further research would be an investigation of who determines the value stance which a sexuality education program takes. Considering the influence the teacher has in selecting the concepts which are being taught, the resource materials used in the classroom, and the attitude toward human sexuality which might be communicated to the students, the selection of teachers to implement these programs is critical.

This study had a very limited focus, namely Nova Scotia home economics teachers. The survey population could be expanded to include other regions of Canada to obtain a broader geographic representation of Canadian attitudes toward sexuality education.

In most school systems sexuality education is taught by teachers from a wide variety of disciplines. Because a teacher's attitude toward sexuality education is very important in program implementation those other disciplines involved in sexuality education could be identified and their attitudes explored.

Recommendations for Further Research

Because the scope of this study does not encompass all areas of sexuality education the need for further research into sexuality education would include:

1. Further validation of the instrument used in this study, as an adequate measure of attitudes toward sexuality education.
2. An identification of those attitudinal and normative considerations which would allow the Ajzen and Fishbein model of "reasoned action" to more accurately predict sexuality education behavior.
3. A determination of those instructional techniques which help the sexuality education teacher to be a more effective purveyor of the curriculum.

4. A determination of those factors which influence the selection and teaching of sexuality education concepts.
5. An exploration of attitudes toward sexuality education within discipline areas other than home economics.
6. A comparison of home economics teachers attitudes toward sexuality education in different regions of Canada with those in this study.
7. A clearer understanding of the issues related to the dilemma of values within sexuality education is essential for sexuality educators. Therefore, further researcher in this area is needed.
8. Since questionnaire format as a vehicle for understanding attitudes has its limitations further research of a qualitative nature might be explored as a means to tap this component of teacher willingness or preparedness to teach; and
9. Further study using a more sophisticated method of analysis, for example multivariate analysis, could be employed to explore the interrelationship between variables such as age, teacher education and years of teaching experience and attitude toward sexuality education.

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APPENDIX A

QUESTIONNAIRE - TEACHING SEXUALITY EDUCATION IN NOVA SCOTIA

TEACHING SEXUALITY EDUCATION IN NOVA SCOTIA

This study was undertaken to better understand attitudes toward teaching sexuality education. Please answer all the questions. Participation in this study is voluntary and your identity will remain anonymous. If you wish to comment on any question or qualify your answers, please feel free to use the space in the margins (or a separate sheet of paper). Your comments will be read and taken into account.

Thank you for your help.

Frances M. Campbell
Box 1867,
Stellarton, Nova Scotia
B0K 1S0

Tel: (902) 752-1324

1

$\overline{1}\ \overline{2}\ \overline{3}\ \overset{1}{\overline{4}}$

PART I

Please circle the number which best describes your personal reaction to the following statements regarding the teaching of sexuality education.

	Strongly disagree	Disagree	Undecided	Agree	Strongly agree	
1. I would be willing to teach sexuality education if given the opportunity.	1	2	3	4	5	(5)
2. Sexuality education should only be taught in the home.	1	2	3	4	5	(6)
3. Sexuality education should be taught in school.	1	2	3	4	5	(7)
4. Sexuality education leads to promiscuity.	1	2	3	4	5	(8)
5. My attitude toward the teaching of sexuality education is favorable.	1	2	3	4	5	(9)
6. I feel personally ready to teach sexuality education.	1	2	3	4	5	(10)
7. Sexuality education classes should be co-educational.	1	2	3	4	5	(11)
8. Sexuality education should be included in the home economics curriculum.	1	2	3	4	5	(12)
9. Sexuality education should be included in health curriculum.	1	2	3	4	5	(13)
10. Sexuality education should be included somewhere in the school curriculum.	1	2	3	4	5	(14)

	SD	D	U	A	SA	
11. Sexual values should be included in sexuality education.	1	2	3	4	5	(15)
12. Birth control information should be included in sex education.	1	2	3	4	5	(16)
13. Schools should only teach the physiological facts related to sexuality.	1	2	3	4	5	(17)
14. Sexual health care knowledge is important for teachers of sexuality education.	1	2	3	4	5	(18)
15. Teachers of human sexuality should be knowledgeable about the factors involved in the decision to parent.	1	2	3	4	5	(19)
16. The school administration is supportive of sexuality education being taught.	1	2	3	4	5	(20)
17. Parents should review topics covered in sexuality education.	1	2	3	4	5	(21)
18. My family thinks I should teach sexuality education.	1	2	3	4	5	(22)
19. My colleagues think I should teach sexuality education.	1	2	3	4	5	(23)
20. My school administration thinks I should teach sexuality education.	1	2	3	4	5	(24)
21. The community thinks I should teach sexuality education.	1	2	3	4	5	(25)
22. I believe I should teach sexuality education.	1	2	3	4	5	(26)
23. Most people who are important to me would support me if I were to teach sexuality education.	1	2	3	4	5	(27)
24. With respect to teaching sexuality education I want to do what my colleagues think I should do.	1	2	3	4	5	(28)

	SD	D	U	A	SA	
25. With respect to teaching sexuality education I want to do what the administration thinks I should do.	1	2	3	4	5	(29)
26. With respect to teaching sexuality I want to do what the community thinks I should do.	1	2	3	4	5	(30)
27. With respect to teaching sexuality education I want to do what my friends think I should do.	1	2	3	4	5	(31)

Please circle the number which best describes your personal readiness to teach topics related to human sexuality in a regular school program provided these topics were within the prescribed school curriculum.

	Strongly disagree	Disagree	Undecided	Agree	Strongly agree	
28. I would be comfortable as a facilitator in discussions of sexuality.	1	2	3	4	5	(32)
29. I am confident I could explain the factors affecting fetal development.	1	2	3	4	5	(33)
30. Explaining variations in sexual orientations or life-style would be difficult to do.	1	2	3	4	5	(34)
31. I feel adequately enough informed about the female reproductive system in order to teach the topic.	1	2	3	4	5	(35)
32. Decisions that need to be made during pregnancy are easy to describe.	1	2	3	4	5	(36)

	SD	D	U	A	SA	
33. I would feel comfortable talking about sexual behavior with adolescents.	1	2	3	4	5	(37)
34. Health care during pregnancy is a topic I'm knowledgable enough to teach.	1	2	3	4	5	(38)
35. Medically induced abortion procedures is a topic I feel well enough informed about to teach.	1	2	3	4	5	(39)
36. Talking objectively about sexual lifestyles that differ from my own would be difficult.	1	2	3	4	5	(40)
37. I'm often uncertain of the correct pronunciation of sexuality terminology.	1	2	3	4	5	(41)
38. I feel comfortable enough with my knowledge about birth control methods to teach the topic.	1	2	3	4	5	(42)
39. I feel comfortable enough with my knowledge about sex role stereotyping to teach the topic.	1	2	3	4	5	(43)
40. I am confident that I could handle classroom humor related to sexuality.	1	2	3	4	5	(44)
41. I am confident that I could relate well with my students while discussing sensitive sexuality topics.	1	2	3	4	5	(45)
42. I feel comfortable enough with my knowledge of sexually transmitted diseases to teach the topic.	1	2	3	4	5	(46)
43. I am familiar with most slang terms adolescents use to describe sexuality.	1	2	3	4	5	(47)
44. I am confident that I could respond comfortably when a student asks a question using a slang sexuality term.	1	2	3	4	5	(48)
45. I am confident that I could explain the fertility cycle.	1	2	3	4	5	(49)

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PART II

Indicate by circling the appropriate number in the column to the left the degree to which you think the following concepts should be taught in a unit or course related to human sexuality.

Indicate by circling the appropriate number in the column to the right the degree to which you teach or have taught the following concepts in a unit or course related to human sexuality.

	No emphasis at all	Little emphasis	Some emphasis	Much emphasis	A great deal of emphasis		No emphasis at all	Little emphasis	Some emphasis	Much emphasis	A great deal of emphasis	
(5)	1	2	3	4	5	male reproductive system	1	2	3	4	5	(6)
(7)	1	2	3	4	5	female reproductive system	1	2	3	4	5	(8)
(9)	1	2	3	4	5	relationships	1	2	3	4	5	(10)
(11)	1	2	3	4	5	sexual values	1	2	3	4	5	(12)
(13)	1	2	3	4	5	homosexuality	1	2	3	4	5	(14)
(15)	1	2	3	4	5	intercourse	1	2	3	4	5	(16)
(17)	1	2	3	4	5	masturbation	1	2	3	4	5	(18)
(19)	1	2	3	4	5	menstruation	1	2	3	4	5	(20)
(21)	1	2	3	4	5	birth control (contraception)	1	2	3	4	5	(22)
(23)	1	2	3	4	5	sexually transmitted diseases	1	2	3	4	5	(24)
(25)	1	2	3	4	5	conception	1	2	3	4	5	(26)
(27)	1	2	3	4	5	sexual life-styles/sexual orientation	1	2	3	4	5	(28)

(29)	1 2 3 4 5	prenatal development	1 2 3 4 5	(30)
(31)	1 2 3 4 5	childbirth	1 2 3 4 5	(32)
(33)	1 2 3 4 5	abortion	1 2 3 4 5	(34)
(35)	1 2 3 4 5	rape	1 2 3 4 5	(36)
(37)	1 2 3 4 5	sexual response	1 2 3 4 5	(38)
(39)	1 2 3 4 5	sex role stereotyping	1 2 3 4 5	(40)
(41)	1 2 3 4 5	sex role socialization	1 2 3 4 5	(42)
(43)	1 2 3 4 5	communication	1 2 3 4 5	(44)
(45)	1 2 3 4 5	self concept/esteem/ self awareness	1 2 3 4 5	(46)
(47)	1 2 3 4 5	values formation/ clarification	1 2 3 4 5	(48)
(49)	1 2 3 4 5	sexual assault/sex offenses	1 2 3 4 5	(50)
(51)	1 2 3 4 5	sexual harrassment	1 2 3 4 5	(52)
(53)	1 2 3 4 5	child sexual abuse	1 2 3 4 5	(54)
(55)	1 2 3 4 5	sex bias	1 2 3 4 5	(56)
(57)	1 2 3 4 5	incest	1 2 3 4 5	(58)
(59)	1 2 3 4 5	poronography	1 2 3 4 5	(60)
(61)	1 2 3 4 5	alcohol, drugs and sexual behavior	1 2 3 4 5	(62)
(63)	1 2 3 4 5	feelings/emotions	1 2 3 4 5	(64)
(65)	1 2 3 4 5	accepting responsibility for behavior	1 2 3 4 5	(66)
(67)	1 2 3 4 5	love	1 2 3 4 5	(68)
(69)	1 2 3 4 5	dating	1 2 3 4 5	(70)
(71)	1 2 3 4 5	drugs, alcohol and tobacco use in pregnancy	1 2 3 4 5	(72)

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(5)	1 2 3 4 5	signs of pregnancy	1 2 3 4 5	(6)
(7)	1 2 3 4 5	miscarriage	1 2 3 4 5	(8)
(9)	1 2 3 4 5	nutrition during pregnancy	1 2 3 4 5	(10)
(11)	1 2 3 4 5	premarital sexual behavior	1 2 3 4 5	(12)
(13)	1 2 3 4 5	sexual health, (hygiene, genital diseases, self examination of breasts and testicles)	1 2 3 4 5	(14)
(15)	1 2 3 4 5	decision making	1 2 3 4 5	(16)
(17)	1 2 3 4 5	problem solving	1 2 3 4 5	(18)
(19)	1 2 3 4 5	sexual decision making	1 2 3 4 5	(20)
(21)	1 2 3 4 5	community resources/agencies (provide help, counselling, assistance)	1 2 3 4 5	(22)
(23)	1 2 3 4 5	family planning	1 2 3 4 5	(24)
(25)	1 2 3 4 5	setting personal standards	1 2 3 4 5	(26)

18

Other (please add and rate additional concepts you think should be included)

______________________________ 1 2 3 4 5

______________________________ 1 2 3 4 5

______________________________ 1 2 3 4 5

______________________________ 1 2 3 4 5

PART III

D U P 4
1 2 3 4

1. In which areas of the above home economics programs do you teach (check more than one if applicable).

(5) ____Foods/Nutrition
(6) ____Clothing/Textiles
(7) ____Family Life
(8) ____Child Care
(9) ____Other (Specify) ______________________________

2. Select the best description of your school.

(10) 1. ____elementary
2. ____junior high (7-9)
3. ____senior high (10-12)
4. ____junior-senior high (7-12)

3. Which of the following best describes the setting of your school?

(11) 1. ____rural
2. ____town
3. ____city
4. ____Other (Specify) ______________________________

4. Which of the following grades do you teach?

(12) 1. ____junior high (7-9)
2. ____senior high (10-12)
3. ____junior-senior high (7-12)
4. ____Other (Specify) ______________________________

5. Approximately how many students are enrolled at your school?

(13) 1. ____less than 100
2. ____101-250
3. ____251-500
4. ____501-750
5. ____750-1,000
6. ____more than 1,000

6. How many teachers teach home economics in your school?

(14) 1. _____1/2
2. _____1
3. _____1 1/2
4. _____2
5. _____2 1/2
6. _____more than 2 1/2

7. What percentage of your time is spent teaching home economics?

(15) 1. _____100%
2. _____more than 50%
3. _____less than 50%

8. Counting the current year how many years of teaching experience do you have?

(16) 1. _____1-5
2. _____6-10
3. _____11-15
4. _____16-20
5. _____21-25
6. _____26-30
7. _____more than 30

9. What is your gender?

(17) 1. _____Male
2. _____Female

10. In which age category did you belong on October 1, 1986?

(18) 1. ____20-29
2. ____30-39
3. ____40-49
4. ____50-59
5. ____over 60

11. What is your current marital status?

(19) 1. ____never married
2. ____married
3. ____widowed
4. ____separated
5. ____divorced

12. Have you taken a university or short course related to human sexuality or human sexuality education?

(20) 1. ____No
2. ____Yes

13. To which of these professional organizations do you belong?

(21) ____Canadian Home Economics Association (CHEA)
(22) ____Nova Scotia Home Economics Association (NSHEA)
(23) ____Home Economics Teachers Association (HETA)
(24) ____Other (home economics related in terms of interests)

____

____

14. Indicate your teacher training (post-high school).

(25) ____Teachers certificate (i.e., Teachers College, other college)
(26) ____University Degree
(27) ____Bachelor of Education Degree
(28) ____Masters Degree
(29) ____Other (Specify) ______________________________

15. Select the area, or areas, which would best depict your home economics training profile.

(30) _____Specialized in foods and nutrition
(31) _____Specialized in clothing and textiles
(32) _____Specialized in family studies and/or consumer studies
(33) _____Specialized in general study of home economics
(34) _____Training not in home economics area
(35) _____Other (Specify) ____________________

16. Would you take a course in sexuality education if one was available?

(36) 1. _____No
2. _____Yes
3. _____Uncertain

17. Have you taken any courses that were helpful in increasing your knowledge of sexuality education?

(37) 1. _____No
2. _____Yes, please list (maximum 5)
a. ____________________
b. ____________________
c. ____________________
d. ____________________
e. ____________________

18. What courses do you consider important to enable a teacher of sexuality education to be knowledgeable?

* *

Your opinion is highly regarded. This section is designed to allow you to express yourself in your own words.

* *

What difficulties, if any, have you experienced while teaching various aspects of human sexuality?

Is there anything you would like to say about sexuality education (i.e., need for, training for, issues, concerns, or other aspects)?

* *

Your contribution to this effort is greatly appreciated. If you would like a summary of the results please print your name and address on the enclosed postcard (NOT on the questionnaire). By mailing the postcard separately and not enclosing it with the questionnaire your anonymity is guaranteed. The postcard requires a stamp.

Thank you very much for your time and effort. Please return the questionnaire in the postage paid, self-addressed envelope.

* *

APPENDIX B

CLEARANCE FOR STUDY

Department of Seocndary Education

Application for Departmental Ethics Review

Instructions: Submit *five* copies of this application to the Department's Research Ethics Review Coordinator

Date: August 1, 1986

Requestor(s):

Frances Campbell (Name) Staff ___ *Ph.D. Student ___ *M.Ed. Student XX

(Name) Staff ___ *Ph.D. Student ___ *M.Ed. Student ___

*Advisor's Name: Dr. V. Lefebvre

Title of Project: Home Economics Teachers' Attitude Toward Sexuality Education

Description of Project: This description should be limited to a maximum of 600 words and attached to the application. It should include a brief discussion of the purpose(s), methodology, data analysis, and ethical considerations.

FOR OFFICE USE ONLY

Review Panel:

Name

Dr. L. Beauchamp

Dr. T. Craig

Dr. D. Parker

Dr. L. Beauchamp

Signature of Panel Chairperson:

Date: September 15, 1986

XX This application conforms with the provisions contained in the University Policy Related to Ethics in Human Research document.

___ This application *does not* conform with the provisions contained in the University Policy Related to Ethics in Human Research document.

PERMISSON TO SURVEY

Letters of permission to survey were received from the following Nova Scotia school boards:

ANNAPOLIS DISTRICT SCHOOL BOARD: J.L. MacDonald, Superintendent

ANTIGONISH DISTRICT SCHOOL BOARD: William J. MacNeil, Superintendent

CAPE BRETON DISTRICT SCHOOL BOARD: Thomas R. Murphy, Supervisor of Secondary Education

CONSEIL SCOLAIRE CLARE ARGYLE: Gertrude Gaudet, Curriculum Supervisor

COLCHESTER-EAST HANTS DISTRICT SCHOOL BOARD: Grant MacDonald, Superintendent

CUMBERLAND DISTRICT SCHOOL BOARD: Jacqueline Guyette, Assistant Superintendent, Curriculum

DARTMOUTH DISTRICT SCHOOL BOARD: Donna M Myers, Supervisor of Home Economics

DIGBY DISTRICT SCHOOL BOARD: William Read, Secondary Curriculum Supervisor

GUYSBOROUGH COUNTY DISTRICT SCHOOL BOARD: John J. Sullivan

HALIFAX COUNTY - BEDFORD DISTRICT SCHOOL BOARD: G.R. Doucet, Supervisor - Western Sub-System

HALIFAX DISTRICT SCHOOL BOARD: Isabel G. Chipman, Supervisor of Home Economics

HANTSPORT BOARD OF SCHOOL COMMISSIONERS: Brian Bishop

HANTS WEST DISTRICT SCHOOL BOARD: David H. Young, Superintendent of Schools

INVERNESS DISTRICT SCHOOL BOARD: Len Kuniski, Superintendent of Schools

KINGS COUNTY DISTRICT SCHOOL BOARD: J. James Keith, Superintendent of Schools

LUNENBURG COUNTY DISTRICT SCHOOL BOARD: Lloyd Campbell, Assistant Superintendent of Schools

NORTHSIDE-VICTORIA DISTRICT SCHOOL BOARD: Robert Weeks, Supervisor of Secondary Curriculum

PICTOU DISTRICT SCHOOL BOARD: Peter White, Chief Education Officer

QUEENS DISTRICT SCHOOL BOARD: Jack Turner, Chief Education Officer

RICHMOND DISTRICT SCHOOL BOARD: David Samson, Superintendent

SHELBURNE COUNTY DISTRICT SCHOOL BOARD: Owen Wheelock, Superintendent

YARMOUTH DISTRICT SCHOOL BOARD: John Daley, Superintendent of Schools

APPENDIX C

CORRESPONDENCE

PRENTICE HALL

COLLEGE BOOK DIVISION

September 16, 1988

Ms. Frances Campbell
Box 1867
Stellarton, Nova Scotia
B0K 1S0

Dear Ms. Campbell:

We are very glad to give you permission to quote from our book(s),

UNDERSTANDING ATTITUDES AND PREDICTING SOCIAL BEHAVIOR
by Ajzen/Fishbein
in accordance with the conditions outlined in your letter of 8/16/88.

Please give credit to the author(s), the title(s), and the publisher with copyright year date(s). Our usual credit line appears below:
Ajzen/Fishbein,UNDERSTANDING ATTITUDES AND PREDICTING SOCIAL BEHAVIOR, c 1980,p.8.Reprinted by permission of Prentice-Hall, Inc., Englewood Cliffs, NJ.

Sincerely,

Glenn E. Bell
Permissions Editor

9/1/20888

August 25th, 1986

Dear ________:

Since sexuality education is a component of many school programs and a very sensitive issue for both teachers and school boards it is important to understand one aspect of that issue - namely teachers' attitudes toward the teaching of sexuality education. As part of my Masters of Education program at the University of Alberta I am conducting a study of home economics teachers' attitudes toward the teaching of sexuality education. I am currently teaching home economics with the Pictou District School Board.

The findings of this study should be of interest to teachers, administrators and curriculum developers working in the area of sexuality education. The purpose of this study is to obtain: (1) teachers' attitudes toward the teaching of sexuality education, (2) teachers' perception of their preparedness to teach sexuality education, and (3) teachers' beliefs about which sexuality education concepts should be taught. In order to achieve the accurate research conclusions which I desire, it is necessary that I obtain the names of all those teaching in the home economics field on either a full or a part-time basis in Nova Scotia. I would like your approval to mail this questionnaire to your home economics teachers as well as to obtain from you a list of their names and addresses. I am enclosing a copy of the questionnaire along with the cover letter I propose to send to the teachers. Complete anonymity will be guaranteed to those who choose to answer the questionnaire. School districts will not be identified in the final report.

I hope that data collection will be completed by December 1986, and that a final report will be compiled by June 1987. If you wish a summary of the final results please indicate this when you send me the list of your home economics teachers. I have enclosed a form and a self-addressed, stamped envelope for your convenience.

If you have any questions I may be reached by calling (902) 752-1324 or by writing to F. Campbell, Box 1867, Stellarton, Nova Scotia, B0K 1S0. Thank you very much for your kind assistance.

Yours sincerely,

Frances Campbell
Graduate Student

Verna Lefebvre, PhD
Professor

FC:dn
Enc.

University of Alberta
Edmonton
Canada T6G 2G5

Department of Secondary Education
Faculty of Education
338 Education South, Telephone (403) 432-3674

Box 1867
Stellarton, N.S.
BOK 1S0
September 25, 1986

I am a home economics teacher with the Pictou District School Board who is conducting a study of home economics teachers' attitudes toward the teaching of sexuality education as part of my Masters of Education program at the University of Alberta. On August 25, 1986 I sent a copy of my proposed questionnaire as well as a request for permission to survey home economics teachers and a list of their names and addresses to all school boards in Nova Scotia. I have received replies from many school boards across Nova Scotia, but have not as yet received yours. I realize that September being a very busy month there is a strong possibility that my survey request form was mislaid. In order to achieve accurate research conclusions it is necessary that I obtain a broad representation of those teaching home economics in Nova Scotia. I would like your approval to mail my questionnaire to your home economics teachers as well as to obtain from you a list of their names and addresses. Individual school districts will not be identified in the final report and complete anonymity will be guaranteed to those who choose to answer the questionnaire. If you do not wish me to survey under your jurisdiction would you please let me know so that I may be confident I've made every effort to secure a broad representation of Nova Scotia home economics teachers.

I hope that data collection will be completed by December 1986, and that a final report will be compiled by June 1987. If you wish a summary of the final results please indicate this when you send me the names and addresses of your home economics teachers. I have enclosed a form and a self-addressed, stamped envelope for your convenience.

Thank you for your kind assistance.

Yours sincerely,

Frances Campbell

Frances Campbell
Graduate Student

Verna Lefebvre

Verna Lefebvre, PhD
Professor

Approval is given for participation of the home economics teachers in this study.

_____ Yes _____ No

Signature: ____

Do you want a copy of the final results?

_____ Yes _____ No

If approval is given for this study please complete the following:

Home Economics teachers presently teaching full or part time in ______________________ District.

Name Address (include Postal Code)

1. ____

____

2. ____

____

3. ____

____

4. ____

____

5. ____

____

6. ____

____

7. ____

____

8. ____

____

A self-addressed, stamped envelope is enclosed. Please send to F. Campbell, Box 1867, Stellarton, Nova Scotia, B0K 1S0. If possible please return by September 8th, 1986.

Box 1867
Stellarton, Nova Scotia, B0K 1S0

October 20th, 1986

Dear

I am a graduate student working on my Masters of Education at the University of Alberta and as part of my program I am conducting a study of home economics teachers' attitudes toward the teaching of sexuality education. I am also a home economics teacher with the Pictou District School Board in Nova Scotia.

I am researching in the area of sexuality education with the hope that new information about sexuality education will be of benefit in programme planning for students and sexuality education teachers. The findings of this study should be of interest to teachers, administrators and curriculum developers working in the area of sexuality education.

I would appreciate your completing and returning the enclosed questionnaire. Although your participation is anonymous and voluntary it is my hope that you will cooperate. A 100% return rate will allow me to generate research conclusions with a good degree of confidence. All data collected will be treated as confidential and non-evaluative for all participants and will be destroyed when no longer needed. The completion of this questionnaire assumes your consent to the anonymous and confidential use of all data. The questionnaire has an identification number for mailing purposes only. This is so that I may check your name off of the mailing list when your questionnaire is returned. In this way, I will not need to trouble you further with follow-up letters. The fact that I have your name implies that I have received permission from your school district to survey in your area.

It should take about 20 minutes to answer all the questions. There are no right or wrong answers to these questions only answers that reflect your feelings about different issues. Please answer each question as completely and honestly as possible. If there are questions you do not wish to answer you may omit them.

I would be pleased to send you a summary of the survey results. In order to preserve your anonymity please print your name and address on the enclosed postcard. The pre-addressed envelope for the questionnaire has return postage included but the postcard for results requires a 34¢ stamp. Please return the questionnaire as soon as possible.

Thank you very much for your assistance in completing my study. If you have any questions I may be reached at the above address or by calling 752-1324 (after six o'clock). I will be attending the home economics conference in Halifax in October, and would be pleased to answer any questions or discuss the survey with you.

Yours sincerely,

Frances Campbell Graduate Student	Verna Lefebvre, PhD Professor

FC:dn
Enc.

P.S. Those of you who are members of CHEA might be interested in knowing that this research is partly funded by the Ruth Binnie Scholarship.

University of Alberta
Edmonton

Department of Secondary Education
Faculty of Education

Canada T6G 2G5
338 Education South, Telephone (403) 432-3674

Box 1867
Stellarton, Nova Scotia
BOK 1S0

November 14, 1986

Dear

Approximately four weeks ago, I mailed you a questionnaire as part of a study on home economics teachers' attitudes toward teaching sexuality education. As of today I have not yet received your questionnaire. It is important to the study that as many participants as possible complete and return the questionnaire because a high return rate will make this data more representative of Nova Scotia home economics teachers. For your convenience I am enclosing a second copy of the survey and a self-addressed, stamped envelope. If you have not yet already done so, I would very much appreciate your completing the questionnaire.

The survey form takes approximately 20 minutes to complete. The number code on the survey form is used to note the return of your reply. All replies will be treated anonymously.

Thank you very much for your assistance in completing my study. If you have already completed the questionnaire and mailed it, ignore this letter.

Thank you for your help.

Yours sincerely,

Frances Campbell

Frances Campbell
Graduate Student

Verna Lefebvre

Verna Lefebvre, PhD
Professor

FC:dn
Enc.

University of Alberta
Edmonton
Canada T6G 2G5

Department of Secondary Education
Faculty of Education
338 Education South, Telephone (403) 432-3674

P.O. Box 1867
Stellarton, N.S.
BOK 1S0
December 19, 1986.

Dear Home Economics Teacher:

I am writing to you about the study I am conducting as part of my Masters of Education program at the University of Alberta on home economics teachers' attitudes toward sexuality education. I have not yet received your completed questionnaire.

The number of questionnaires returned is encouraging. But, whether I will be able to describe exactly how home economics teachers feel about sexuality education depends upon you and others who have not yet responded.

This is the first survey of this type that has been done in this area. Therefore, the results are of particular importance to teachers, administrators and curriculum developers now considering the types of sexuality education which should be taught and who teaches these programs. The usefulness of my results depends on how accurately I am able to describe the attitudes of home economics teachers.

A questionnaire and stamped, addressed return envelope were provided to you in two earlier mailouts - one in October and one in November. If these have been misplaced and you need a replacement questionnaire I would be happy to provide one to you. Contact me at Box 1867, Stellarton, Nova Scotia, BOK 1S0 or call 752-1324. I urge you to complete and return the questionnaire as soon as possible.

Your contribution to the success of this study will be appreciated greatly.

Most sincerely,

Frances Campbell

Frances Campbell

P.S. Good luck for a happy 1987 school year.

PLACE
STAMP
HERE

Frances Campbell
P.O. Box 1867
Stellarton, N.S.
B0K 1S0

I Would Like A Copy Of The Survey Results

NAME ....

ADDRESS ....

....

PHONE ....

APPENDIX D

TABLES

Table D-1

Percentage Frequency Distribution of Responses to Questions
1 to 27 of TSE Questionnaire, Number of Responses,
Means and Standard Deviations
(n = 194)

Item	N	Percentage of Responses* 1	2	3	4	5	Other**	Mean	Standard Deviation
1. I would be willing to teach sexuality education if given the opportunity.	194	2.1	4.1	13.4	40.7	39.7	-	4.119	0.934
2. Sexuality education should only be taught in the home.	194	63.9	31.4	1.5	1.0	2.1	-	4.541	0.769
3. Sexuality education should be taught in school.	193	2.1	1.0	3.1	44.8	48.5	0.5	4.351	0.840
4. Sexuality education leads to promiscuity	188	60.8	30.4	2.6	2.1	1.0	3.1	4.387	1.077
5. My attitude toward the teaching of sexuality education is favourable.	194	1.0	1.5	2.1	49.0	46.4	-	4.381	0.704
6. I feel personally ready to teach sexuality education.	194	5.7	10.3	19.6	38.1	26.3	-	3.691	1.137

Table D-1 (continued)

Item	N	Percentage of Responses* 1	2	3	4	5	Other**	Mean	Standard Deviation
7. Sexuality education classes should be co-educational.	193	4.1	4.6	29.9	29.4	31.4	0.5	3.778	1.100
8. Sexuality education should be included in the home economics curriculum.	192	2.6	7.7	12.4	40.7	35.6	1.0	3.959	1.091
9. Sexuality education should be included in health curriculum.	192	6.2	8.8	24.2	41.8	18.0	1.0	3.536	1.134
10. Sexuality education should be included somewhere in the school curriculum.	193	2.1	1.5	4.6	31.4	59.8	0.5	4.438	0.887
11. Sexual values should be included in sexuality education.	190	2.6	3.1	11.9	35.1	45.4	2.1	4.113	1.119
12. Birth control information should be included in sex education.	193	1.0	2.1	3.6	42.8	50.0	0.5	4.371	0.812
13. Schools should only teach the physiological facts related to sexuality.	190	38.7	42.8	7.7	4.1	4.6	2.1	4.005	1.176

Table D-1 (continued)

Item	N	Percentage of Responses* 1	2	3	4	5	Other**	Mean	Standard Deviation
14. Sexual health care knowledge is important for teachers of sexuality education.	192	0.0	0.0	3.1	40.7	55.2	1.0	4.479	0.721
15. Teachers of human sexuality should be knowledgeable about the factors involved in the decision to parent.	193	0.0	0.5	2.1	36.6	60.3	0.5	4.552	0.652
16. The school administration is supportive of sexuality being taught.	189	1.5	4.6	25.3	41.2	24.7	2.6	3.753	1.087
17. Parents should review topics covered in sexuality education.	193	0.0	1.5	11.9	55.2	30.9	0.5	4.139	0.745
18. My family thinks I should teach sexuality education.	173	2.6	5.2	42.3	23.7	14.9	11.3	3.093	1.418
19. My colleagues think I should teach sexuality education.	178	3.1	4.1	45.9	25.8	12.9	8.2	3.165	1.289
20. My school administration thinks I should teach sexuality education.	175	3.1	7.2	48.5	21.1	10.3	9.8	2.990	1.308

Table D-1 (continued)

Item	N	Percentage of Responses* 1	2	3	4	5	Other**	Mean	Standard Deviation
21. The community thinks I should teach sexuality education.	170	3.1	6.7	57.7	17.0	3.1	12.4	2.732	1.239
22. I believe I should teach sexuality education.	188	3.1	6.7	20.1	41.8	25.3	3.1	3.701	1.189
23. Most people who are important to me would support me if I were to teach sexuality education.	191	1.0	1.5	8.8	52.6	34.5	1.5	4.134	0.906
24. With respect to teaching sexuality education I want to do what my colleagues think I should do.	183	14.9	26.8	34.0	17.0	1.5	5.7	2.464	1.152
25. With respect to teaching sexuality education I want to do what the administration thinks I should do.	188	4.1	10.8	27.8	47.9	6.2	3.1	3.320	1.087
26. With respect to teaching sexuality education I want to do what the community thinks I should do.	187	4.6	12.9	32.0	41.2	5.7	3.6	3.196	1.116

Table D-1 (continued)

Item	N	Percentage of Responses* 1	2	3	4	5	Other**	Mean	Standard Deviation
27. With respect to teaching sexuality education I want to do what my friends think I should do.	185	15.5	37.6	32.5	8.8	1.0	4.6	2.284	1.016

* 1 strongly disagree
2 disagree
3 undecided
4 agree
5 strongly agree

** Other indicates percent of non-respondents

Table D-2

Analysis of Variance of Attitude Toward Teaching Sexuality Education for Respondents in Different Categories of Age

Source	Sum of Squares	Mean Square	Degree of Freedom	F
Between Groups	149.6650	49.8883	3	1.5149*
Within Groups	6191.2048	32.9319	188	
Total	6340.8698			

* not significant at $p < .05$

Table D-3

Analysis of Variance of Attitude Toward Teaching Sexuality Education for Respondents in Different Categories of Teacher Education

Source	Sum of Squares	Mean Square	Degree of Freedom	F
Between Groups	194.0084	64.6695	3	1.9755*
Within Groups	6121.4680	32.7351	187	
Total	6315.4764			

* not significant at $p < .05$

Table D-4

Analysis of Variance of Attitude Toward Teaching Sexuality Education for Respondents in Different Categories of Years of Teaching Experience

Source	Sum of Squares	Mean Square	Degree of Freedom	F
Between Groups	41.2354	13.7451	3	.4016*
Within Groups	6468.4330	34.2245	189	
Total	6509.6684			

* not significant at $p < .05$

Table D-5

Analysis of Variance of Willingness to Teach Sexuality Education for Respondents in Different Categories of Age

Source	Sum of Squares	Mean Square	Degree of Freedom	F
Between Groups	63.4702	21.1567	3	2.6297*
Within Groups	1512.5298	8.0454	188	
Total	1576.0000			

* not significant at $p < .05$

Table D-6

Analysis of Variance of Willingness to Teach Sexuality Education for Respondents in Different Categories of Years of Teaching Experience

Source	Sum of Squares	Mean Square	Degree of Freedom	F
Between Groups	32.1315	10.7105	3	1.3093*
Within Groups	1546.1069	8.1805	189	
Total	1578.2383			

* not significant at $p < .05$

Table D-7

Analysis of Variance of Willingness to Teach Sexuality Education for Respondents in Different Categories of School Size

Source	Sum of Squares	Mean Square	Degree of Freedom	F
Between Groups	17.9531	8.9766	2	1.0918*
Within Groups	1553.9635	8.2220	189	
Total	1571.9167			

* not significant at $p < .05$

Table D-8

CHI-SQUARE ANALYSIS OF COLLEAGUES SUPPORT FOR SEXUALITY EDUCATION

```
 2 AUG 88    SPSS-X RELEASE 2.2  FOR IBM MTS
15:05:17     University of Alberta

- - - - - - - - - - - - - - - - - - -   C R O S S T A B U L A T I O N   O F  - - - - - - - - - -
    P19                                                              BY  P24
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -

                        P24
              COUNT   |
              ROW PCT |                                    ROW
              COL PCT |                                    TOTAL
                      |        1|        3|        4|
P19          ---------+---------+---------+---------+
                  1   |    14   |         |         |      14
                      |  100.0  |         |         |      8.1
                      |   18.9  |         |         |
                      +---------+---------+---------+
                  3   |    36   |    34   |    17   |      87
                      |   41.4  |   39.1  |   19.5  |     50.3
                      |   48.6  |   53.1  |   48.6  |
                      +---------+---------+---------+
                  4   |    24   |    30   |    18   |      72
                      |   33.6  |   41.7  |   25.0  |     41.6
                      |   32.4  |   46.9  |   51.4  |
                      +---------+---------+---------+
              COLUMN       74        64        35         173
              TOTAL      42.8      37.0      20.2       100.0


 CHI-SQUARE     D.F.      SIGNIFICANCE        MIN E.F.     CELLS WITH E.F.< 5
 ----------     ----      ------------        --------     ------------------

  21.62533        4          0.0002            2.832       1 OF     9 ( 11.1%)

NUMBER OF MISSING OBSERVATIONS =        21
```

P19: My colleagues think I should teach sexuality education.

P24: With respect to teaching sexuality education I want to do what my colleagues think I should do.

Table D-9

CHI-SQUARE ANALYSIS OF SCHOOL ADMINISTRATION SUPPORT FOR SEXUALITY EDUCATION

```
  2 AUG 88    SPSS-X RELEASE 2.2  FOR IBM/MTS
15:05:17      University of Alberta

- - - - - - - - - - - - - - - - - - - C R O S S T A B U L A T I O N   O F - - - - - - - - - - - -
   P20                                                   BY P25
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -

                      P25
           COUNT     |
           ROW PCT   |                              ROW
           COL PCT   |                              TOTAL
                     |       1|        3|       4|
P20        ----------+--------+---------+--------+
                 1   |     7  |      2  |     11 |     20
                     |  35.0  |   10.0  |   55.0 |   11.5
                     |  25.9  |    3.9  |   11.5 |
                     +--------+---------+--------+
                 3   |    13  |     35  |     46 |     94
                     |  13.8  |   37.2  |   48.9 |   54.0
                     |  46.1  |   66.6  |   47.9 |
                     +--------+---------+--------+
                 4   |     7  |     14  |     39 |     60
                     |  11.7  |   23.3  |   65.0 |   34.5
                     |  25.9  |   27.5  |   40.5 |
                     +--------+---------+--------+
           COLUMN        27        51        96      174
           TOTAL       15.5      29.3      55.2    100.0

  CHI-SQUARE     D.F.      SIGNIFICANCE        MIN E.F.      CELLS WITH E.F.< 5
  ----------     ----      ------------        --------      ------------------

   12.64045        4         0.0132              3.103        1 OF     9 ( 11.1%)

NUMBER OF MISSING OBSERVATIONS =      20
```

P20: My school administration thinks I should teach sexuality education.

P25: With respect to teaching sexuality education I want to do what the administration thinks I should do.

Table D-10

CHI-SQUARE ANALYSIS FOR COMMUNITY SUPPORT FOR SEXUALITY EDUCATION

```
 2 AUG 88    SPSS-X RELEASE 2.2   FOR IBM MTS
15:05:17     University of Alberta

- - - - - - - - - - - - - - - - - - - - - - -  C R O S S T A B U L A T I O N   O F  - - - - - - - - - - - - - -
   P21                                                          BY  P26
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -

                      P26
             COUNT   |
             ROW PCT |                                   ROW
             COL PCT |                                  TOTAL
                     |         1|         3|         4|
P21          --------+----------+----------+----------+
                  1  |      9   |      3   |      7   |    19
                     |   47.4   |   15.8   |   36.8   |   11.2
                     |   32.1   |    5.4   |    8.1   |
                     +----------+----------+----------+
                  3  |     15   |     45   |     52   |   112
                     |   13.4   |   40.2   |   46.4   |   65.9
                     |   53.6   |   80.4   |   60.5   |
                     +----------+----------+----------+
                  4  |      4   |      8   |     27   |    39
                     |   10.3   |   20.5   |   69.2   |   22.9
                     |   14.3   |   14.3   |   31.4   |
                     +----------+----------+----------+
             COLUMN        28         56         86       170
              TOTAL      16.5       32.9       50.6     100.0

CHI-SQUARE     D.F.       SIGNIFICANCE        MIN E.F.      CELLS WITH E.F.< 5
----------     ----       ------------        --------      ------------------

  21.64991        4          0.0002              3.129      1 OF     9 ( 11.1%)

NUMBER OF MISSING OBSERVATIONS =      24
```

P21: The community thinks I should teach sexuality education.

P26: With respect to teaching sexuality I want to do what the community thinks I should do.

Table D-11

Percentage Frequency Distribution of Responses, Number of Respondents, Means and Standard Deviation For Item Response to Subscale "Preparedness To Teach Sexuality Education" (n = 194)

Item	N	Percentage of Responses* 1	2	3	4	5	Other**	Mean	Standard Deviation
28. I would be comfortable as a facilitator in discussions of sexuality.	191	3.1	7.2	12.4	51.0	24.7	1.5	3.825	1.077
29. I am confident I could explain the factors affecting fetal development.	192	1.5	1.0	3.6	46.9	45.9	1.0	4.314	0.863
*** 30. Explaining variations in sexual orientations for life-style would be difficult to do.	191	8.8	39.7	24.2	19.6	5.7	1.5	3.216	1.126
31. I feel adequately enough informed about the female reproductive system in order to teach the topic.	191	1.0	2.6	3.1	46.9	44.8	1.5	4.273	0.923
32. Decisions that need to be made during pregnancy are easy to describe.	188	3.6	21.1	14.9	36.6	20.6	3.1	3.402	1.293

Table D-11 (continued)

Item	N	Percentage of Responses* 1	2	3	4	5	Other**	Mean	Standard Deviation
33. I would feel comfortable talking about sexual behaviour with adolescents.	193	3.6	5.7	13.4	47.4	29.4	0.5	3.918	1.030
34. Health care during pregnancy is a topic I'm knowledgeable enough to teach.	194	1.0	4.1	4.6	50.5	39.7	-	4.237	0.805
35. Medically induced abortion procedures is a topic I feel well enough informed about to teach.	194	9.3	36.6	20.1	24.2	9.8	-	2.887	1.168
*** 36. Talking objectively about sexual life-styles that differ from my own would be difficult.	194	12.9	39.7	23.2	19.1	5.2	-	3.361	1.089
*** 37. I'm often uncertain of the correct pronunciation of sexuality terminology.	192	24.7	49.0	11.3	10.3	3.6	1.0	3.778	1.105

Table D-11 (continued)

Item	N	Percentage of Responses* 1	2	3	4	5	Other**	Mean	Standard Deviation
38. I feel comfortable enough with my knowledge about birth control methods to teach the topic.	194	1.5	11.9	10.8	47.9	27.8	-	3.887	0.996
39. I feel comfortable enough with my knowledge about sex role stereotyping to teach the topic.	192	1.5	10.8	10.3	51.5	24.7	1.0	3.840	1.033
40. I am confident that I could handle classroom humor related to sexuality.	194	3.6	4.1	14.9	53.1	24.2	-	3.902	0.936
41. I am confident that I could relate well with my students while discussing sensitve sexuality topics.	194	3.1	5.2	22.7	45.9	23.2	-	3.809	0.955
42. I feel comfortable enough with my knowledge of sexually transmitted diseases to teach the topic.	194	2.6	21.1	18.0	40.2	18.0	-	3.500	1.093
43. I am familiar with most slang terms adolescents use to describe sexuality.	194	2.1	12.4	23.2	45.9	16.5	-	3.624	0.970

Table D-11 (continued)

Item	N	Percentage of Responses* 1	2	3	4	5	Other**	Mean	Standard Deviation
44. I am confident that I could respond comfortably when a student asks a question using slang sexuality term.	193	1.5	7.7	23.2	46.4	20.6	0.5	3.753	0.955
45. I am confident that I could explain the fertility cycle.	193	1.0	2.6	4.1	51.0	40.7	0.5	4.263	0.813

* 1 strongly disagree
2 disagree
3 undecided
4 agree
5 strongly agree

** Other indicates percent of non-respondents

*** Reverse polarity for items No. 30, 36, 37.

Table D-12

Analysis of Variance of Perception of Preparedness to Teach Sexuality Education for Respondents in Different Categories of Age

Source	Sum of Squares	Mean Square	Degree of Freedom	F
Between Groups	1126.7472	375.5824	3	2.7335*
Within Groups	25830.7476	137.3976	188	
Total	26957.4948			

* not significant at $p < .05$

Table D-13

Analysis of Variance of Perception of Preparedness to Teach Sexuality Education for Respondents in Different Categories of Teacher Education

Source	Sum of Squares	Mean Square	Degree of Freedom	F
Between Groups	1313.7983	437.9328	3	3.2081*
Within Groups	25527.4164	136.5102	187	
Total	26841.2147			

* not significant at $p < .05$

Table D-14

Analysis of Variance of Perception of Preparedness to Teach Sexuality Education for Respondents in Different Categories of Years of Teaching Experience

Source	Sum of Squares	Mean Square	Degree of Freedom	F
Between Groups	492.8761	164.2920	3	1.1691*
Within Groups	26559.2897	140.5253	189	
Total	27052.1658			

* not significant at $p < .05$

Table D-15

Percentage Frequency Distribution, Number of Responses, Means and Standard Deviations for "Should Teach" Responses to Part II of TSE Questionnaire
(n = 194)

Sexuality Education Concepts	N	Percentage of Responses* 1	2	3	4	5	Other**	Mean	Standard Deviation
Male Reproductive	193	0.5	1.5	35.1	37.6	24.7	0.5	3.830	0.874
Female Reproductive	193	0.5	1.0	28.4	41.2	28.4	0.5	3.943	0.859
Relationships	193	0.0	0.0	9.3	37.1	53.1	0.5	4.418	0.731
Sexual Values	191	0.5	2.1	18.0	38.1	39.7	1.5	4.098	0.974
Homosexuality	193	4.1	26.8	59.8	7.2	1.5	0.5	2.737	0.740
Intercourse	192	4.1	17.0	54.1	17.0	6.7	1.0	3.021	0.933
Masturbation	193	6.7	36.1	46.4	7.2	3.1	0.5	2.624	0.856
Menstruation	190	0.5	4.1	37.1	31.4	24.7	2.1	3.696	1.036
Birth Control (contraception)	193	1.0	4.1	24.2	38.1	32.0	0.5	3.943	0.951
Sexually Transmitted Diseases	193	1.0	0.5	21.6	42.3	34.0	0.5	4.062	0.868
Conception	191	0.5	1.0	24.2	40.2	32.5	1.5	3.985	0.952

Table D-15 (continued)

Sexuality Education Concepts	N	Percentage of Responses* 1	2	3	4	5	Other**	Mean	Standard Deviation
Sexual life-style/ Sexual orientation	192	2.6	10.8	51.0	22.7	11.9	1.0	3.273	0.967
Prenatal development	190	1.0	1.5	18.6	38.7	38.1	2.1	4.052	1.027
Childbirth	190	2.6	3.6	31.4	33.5	26.8	2.1	3.722	1.103
Abortion	190	4.1	13.4	52.6	21.6	6.2	2.1	3.062	0.974
Rape	189	4.1	16.5	45.4	23.2	8.2	2.6	3.072	1.060
Sexual response	185	7.7	20.6	49.5	13.4	4.1	4.6	2.716	1.076
Sex role stereotyping	189	1.0	9.3	41.2	32.5	13.4	2.6	3.402	1.035
Sex role socialization	184	3.6	7.2	38.7	33.0	12.4	5.2	3.278	1.198
Communication	190	0.5	4.6	13.4	30.4	49.0	2.1	4.165	1.079
Self concept/esteem self awareness	189	0.0	2.6	11.3	20.1	63.4	2.6	4.366	1.065
Values formation/clarification	189	1.0	1.5	14.4	21.6	58.8	2.6	4.278	1.108
Sexual assault/sex offences	189	2.1	14.9	44.3	25.3	10.8	2.6	3.201	1.056

Table D-15 (continued)

Sexuality Education Concepts	N	Percentage of Responses* 1	2	3	4	5	Other**	Mean	Standard Deviation
Sexual harrassment	188	3.1	19.6	40.7	23.7	9.8	3.1	3.082	1.107
Child sexual abuse	188	1.5	8.2	34.0	29.4	23.7	3.1	3.562	1.165
Sex bias	188	3.1	16.0	51.5	21.1	5.2	3.1	3.000	0.992
Incest	189	4.1	25.3	43.8	18.0	6.2	2.6	2.892	1.035
Pornography	188	7.2	25.8	43.3	15.5	5.2	3.1	2.763	1.065
Alcohol, drugs and sexual behavior	189	1.5	7.2	36.1	29.4	23.2	2.6	3.577	1.123
Feelings/emotions	190	1.0	2.1	12.9	39.2	42.8	2.1	4.144	1.023
Accepting responsibility for behavior	188	0.5	2.6	8.2	29.4	56.2	3.1	4.289	1.101
Love	190	1.5	2.6	16.0	36.1	41.8	2.1	4.077	1.072
Dating	190	0.5	3.6	16.0	42.3	35.6	2.1	4.026	1.020
Drugs, alcohol and tobacco use in pregnancy	190	0.5	3.1	12.9	32.0	49.5	2.1	4.206	1.043
Signs of pregnancy	190	1.0	4.6	32.5	29.4	30.4	2.1	3.773	1.092

Table D-15 (continued)

Sexuality Education Concepts	N	Percentage of Responses* 1	2	3	4	5	Other**	Mean	Standard Deviation
Miscarriage	190	3.6	20.6	46.4	14.9	12.4	2.1	3.057	1.088
Nutrition during pregnancy	190	0.0	2.6	12.4	25.8	57.2	2.1	4.314	1.018
Premarital sexual behavior	189	2.6	7.7	32.5	37.6	17.0	2.6	3.510	1.102
Sexual health	190	1.0	7.2	29.4	27.8	32.5	2.1	3.773	1.134
Decision making	190	0.0	1.5	12.4	37.6	46.4	2.1	4.227	0.966
Problem solving	190	0.0	2.1	14.4	38.1	43.3	2.1	4.165	0.984
Sexual decision making	190	1.0	4.1	14.4	35.6	42.8	2.1	4.088	1.076
Community resources/agencies	190	1.0	2.6	20.1	36.6	37.6	2.1	4.010	1.053
Family planning	190	1.5	5.7	25.8	35.6	29.4	2.1	3.794	1.101
Setting personal standards	190	1.5	1.0	14.4	30.4	50.5	2.1	4.211	1.059

* 1 no emphasis at all
2 little emphasis
3 some emphasis
4 much emphasis
5 a great deal of emphasis

** Other indicates percent of non-respondents

Table D-16

Percentage Frequency Distribution, Number of Responses, Means and Standard Deviations for "Have Taught" Responses to Part II of TSE Questionnaire
(n = 194)

Sexuality Education Concepts	N	Percentage of Responses* 1	2	3	4	5	Other**	Mean	Standard Deviation
Male Reproductive	173	23.2	16.0	26.3	18.0	5.2	11.3	2.320	1.429
Female Reproductive	176	9.8	4.6	25.8	30.9	19.6	9.3	3.180	1.532
Relationships	172	4.1	5.7	27.8	29.4	21.6	11.3	3.247	1.534
Sexual Values	171	13.4	10.3	29.9	22.2	12.4	11.9	2.742	1.539
Homosexuality	171	49.5	19.6	16.5	2.6	0.0	11.9	1.485	0.988
Intercourse	172	29.4	27.8	22.7	7.2	1.5	11.3	1.897	1.183
Masturbation	171	52.1	24.7	10.8	0.5	0.0	11.9	1.361	0.848
Menstruation	171	8.2	2.6	22.7	30.9	23.7	11.9	3.237	1.624
Birth Control (contraception)	172	23.2	11.9	17.5	21.1	14.9	11.3	2.588	1.649
Sexually Transmitted Diseases	173	20.6	15.5	22.7	18.0	12.4	10.8	2.536	1.558
Conception	173	14.9	8.8	20.6	25.3	19.6	10.8	2.933	1.645

Table D-16 (continued)

Sexuality Education Concepts	N	Percentage of Responses* 1	2	3	4	5	Other**	Mean	Standard Deviation
Sexual life-style/ Sexual orientation	171	33.0	18.0	24.7	9.3	3.1	11.9	1.959	1.307
Prenatal development	170	10.8	6.2	15.5	26.8	28.4	12.4	3.186	1.730
Childbirth	170	14.9	11.3	22.7	20.6	18.0	12.4	2.784	1.649
Abortion	166	25.8	27.3	21.6	9.3	1.5	14.4	1.902	1.249
Rape	168	37.6	24.2	15.5	6.7	2.6	13.4	1.722	1.224
Sexual response	167	42.8	19.6	20.6	2.6	0.5	13.9	1.567	1.076
Sex role stereotyping	169	14.9	19.1	32.5	13.4	7.2	12.9	2.402	1.423
Sex role socialization	168	18.6	17.5	30.4	16.0	4.1	13.4	2.294	1.400
Communication	171	5.2	8.2	21.1	28.4	25.3	11.9	3.247	1.613
Self concept/esteem self awareness	171	4.6	4.6	18.6	24.7	35.6	11.9	3.464	1.664
Values formation/clarification	171	6.7	3.6	22.7	25.8	29.4	11.9	3.320	1.648
Sexual assault/sex offences	170	38.7	19.1	19.1	8.8	2.1	12.4	1.794	1.255

Table D-16 (continued)

Sexuality Education Concepts	N	Percentage of Responses* 1	2	3	4	5	Other**	Mean	Standard Deviation
Sexual harrassment	168	43.8	18.6	15.5	7.7	1.0	13.4	1.634	1.185
Child sexual abuse	168	21.6	16.5	26.3	10.3	11.9	13.4	2.340	1.546
Sex bias	167	37.6	21.6	19.1	5.2	2.6	13.9	1.716	1.220
Incest	169	43.8	24.2	10.8	6.7	1.5	12.9	1.539	1.145
Pornography	167	51.5	20.1	11.3	2.1	1.0	13.9	1.392	0.998
Alcohol, drugs and sexual behavior	169	27.8	15.5	21.6	11.9	10.3	12.9	2.227	1.541
Feelings/emotions	171	4.1	7.2	20.1	32.5	24.2	11.9	3.299	1.588
Accepting responsibility for behavior	172	8.2	5.2	18.6	26.8	29.9	11.3	3.309	1.669
Love	170	9.3	11.9	22.7	25.3	18.6	12.4	2.948	1.615
Dating	171	8.2	10.3	22.2	30.4	17.0	11.9	3.021	1.580
Drugs, alcohol and tobacco use in pregnancy	170	10.8	9.8	15.5	23.2	28.4	12.4	3.113	1.736
Signs of pregnancy	168	12.9	12.9	23.2	19.1	18.6	13.4	2.773	1.657

Table D-16 (continued)

Sexuality Education Concepts	N	Percentage of Responses* 1	2	3	4	5	Other**	Mean	Standard Deviation
Miscarriage	168	27.8	23.2	24.2	7.7	3.6	13.4	1.959	1.303
Nutrition during pregnancy	169	6.2	6.2	17.5	23.7	33.5	12.9	3.335	1.717
Premarital sexual behavior	168	27.3	13.9	24.7	16.5	4.1	13.4	2.160	1.440
Sexual health	168	29.4	16.0	18.6	14.4	8.2	13.4	2.160	1.524
Decision making	171	4.6	6.7	20.6	34.0	22.2	11.9	3.268	1.577
Problem solving	170	6.7	10.3	23.2	30.9	16.5	12.4	3.031	1.570
Sexual decision making	168	18.0	9.8	25.3	21.1	12.4	13.4	2.598	1.607
Community resources/agencies	166	15.5	14.4	22.7	18.0	14.9	14.4	2.593	1.640
Family planning	168	23.2	11.9	18.6	20.1	12.9	13.4	2.474	1.645
Setting personal standards	169	11.3	9.8	20.1	26.8	19.1	12.9	2.938	1.659

* 1 no emphasis at all; 3 some emphasis; 5 a great deal of emphasis
2 little emphasis; 4 much emphasis

** Other indicates percent of non-respondents

Table D-17

Analysis of Variance of Attitude Toward Teaching Sexuality Education for Respondents in Different Categories of Areas of Specialization

Source	Sum of Squares	Mean Square	Degree of Freedom	F
Between Groups	205.4570	68.4857	3	2.0656*
Within Groups	4741.2096	33.1553	143	
Total	4946.6667			

* not significant at $p < .05$

Table D-18

Analysis of Variance of Belief in Teaching Sexuality Education Concepts for Respondents in Different Categories of Areas of Specialization

Source	Sum of Squares	Mean Square	Degree of Freedom	F
Between Groups	289.9460	96.6487	3	.1192*
Within Groups	115970.5166	810.9826	143	
Total	116260.4626			

* not significant at $p < .05$

Table D-19

Analysis of Variance of Actual Teaching of Sexuality Education for Respondents in Different Categories of Areas of Specialization

Source	Sum of Squares	Mean Square	Degree of Freedom	F
Between Groups	11439.6705	3813.2235	3	1.5735*
Within Groups	346555.3635	2423.4641	143	
Total	357995.0340			

* not significant at $p < .05$

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THE UNIVERSITY OF ALBERTA

SEXUALITY EDUCATION

by

FRANCES MARGUERITE CAMPBELL

A THESIS
SUBMITTED TO THE FACULTY OF GRADUATE STUDIES AND RESEARCH
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SPRING, 1989

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DEDICATION

This thesis is dedicated to the late Alice MacKinnon, Home Economics Consultant, Nova Scotia Department of Education, whose example of dedication, professionalism and commitment to Home Economics inspired me to explore new territories.

ABSTRACT

Sexuality education is a component of many Canadian school curricula. Concern has been expressed about the type of sexuality education, the concepts taught, and who does the teaching. The purpose of this study is to explore teacher attitudes toward the teaching of sexuality education, teacher perceived preparedness to teach sexuality education and teacher belief about which concepts should be included in a sexuality education program.

A self-administered questionnaire was designed to collect data about the various facets of teaching sexuality education. All Nova Scotia home economics teachers, as identified by their local school boards, were surveyed during the fall of 1986. Frequency distribution, analysis of variance and chi-square were used to analyze the quantitative component of the Teaching Sexuality Education Questionnaire while content analysis was used on the open-ended questions.

The majority of respondents (95.4%) reported a favorable attitude toward the teaching of sexuality education. While 80.4% would be willing to teach sexuality education, only 64.4% felt personally ready to teach sexuality education. Neither age nor years of experience had an effect on attitude toward teaching sexuality education, willingness to teach sexuality education or perception of preparedness to teach sexuality education. Willingness to teach sexuality education was affected by level of teacher education and grade level taught. Those teachers in larger schools and teaching senior high students were more positive in their attitude toward sexuality education and were more willing to teach sexuality education. When survey respondents believed that colleagues, the school administration and the community supported the teaching of sexuality education they were willing to act on that belief. There is a relationship between sexuality education concepts home economics teachers believe should be taught and those they actually teach.

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CHAPTER I

Introduction

Sexuality education has become a component of many Canadian school curricula. Some provinces mandate that all students receive sexuality education, while others make it an optional component of health, family studies, or personal and social development curriculums (Alberta Education, 1983; Education Manitoba, 1984; Hofbeck, 1985). Implementation of sexuality education programs often becomes an emotional and controversial issue. Concern has been expressed by parents, teachers and the community about the type of sexuality education, the concepts taught, and who does the teaching (Elkind, 1984; Evenson, 1973; Parrot, 1984).

The qualifications of those teaching sexuality education have been a concern since the inception of programs in the early 1900s (Carrera, 1971). Sexuality education and the attitudes of teachers presenting the program, or sexuality components within an integrated program, are deemed to have an impact on students (Youells, 1981). Attitudes represent an intrinsic part of our being, are based on our value and belief system and guide our behavior. Research suggests that a relationship does exist between attitude and behavior (Fishbein & Ajzen, 1975; Stern & Keislar, 1977). Boyd (1981) believes that in teaching sexuality education concepts, attitudes held toward human sexuality are likely transmitted along with the facts and information component of the curriculum. Because of the potentially sensitive nature of sexuality education and the influence a teacher's attitude toward sexuality education has on the manner in which sexuality education concepts are selected and presented, studies to explore teacher attitudes toward teaching sexuality education are important.

Statement of the Problem

The purpose of this study is to explore teacher attitudes toward the teaching of sexuality education, teacher willingness to teach sexuality education, teacher perceived preparedness to teach sexuality education and teacher belief about which concepts should be included in a sexuality education program. Studies have shown that teachers should be knowledgeable, possess good communication skills, have a positive attitude toward sexuality education and be comfortable with their own sexuality (Carrera, 1981; Harriman, 1985; Reed & Munson, 1976). Therefore, if programs are to be delivered effectively, teachers' attitudes toward the curriculum must be understood.

Home economics teachers, along with teachers in other subject areas, are involved in sexuality education (Eyre, 1985; Herold & Benson, 1979; MacDougall, 1982; Sheek, 1984). In Nova Scotia, concepts in sexuality education are components of that province's program of studies in home economics, especially in the area of family studies. Knowledge gained from the study of teacher attitudes toward sexuality education would be of benefit to curriculum planners, to those organizing teacher education programs for educators concerned with sexuality education, and for those implementing school based sexuality education programs.

Research Questions

The research questions this study will attempt to answer are:

1. Attitudes Toward Sexuality Education
    - 1.1 Are home economics teachers in favor of the teaching of sexuality education in schools?
    - 1.2 Are age, teacher education, years of teaching experience, school size and grade level taught significant in terms of the home economics teacher's attitude toward the teaching of sexuality education in the school?
2. Willingness To Teach Sexuality Education
    - 2.1 If given the opportunity, would home economics teachers be willing to teach sexuality education?
    - 2.2. Are age, teacher education, years of teaching experience, school size and grade level taught significant in terms of the home economics teacher's willingness to teach sexuality education in the school?
    - 2.3 What is the relationship between perceived support for sexuality education from colleagues, school administration and the willingness to act on that support?
3. Perception of Preparedness To Teach Sexuality Education
    - 3.1 Do home economics teachers perceive themselves as prepared to teach sexuality education?
    - 3.2 Are age, teacher education and years of teaching experience significant in terms of the home economics teacher's perception of preparedness to teach sexuality education?

4. Teaching of Sexuality Education Concepts
    4.1 What concepts do home economics teachers believe should be taught in sexuality education and what concepts do teachers actually cover in the classes they teach?
    4.2 Is there a relationship between what home economics teachers believe they should teach and what they actually do teach?
5. Area of Specialization
    5.1 Is the area of specialization in home economics significant in terms of teacher's attitude toward teaching sexuality education, willingness to teach sexuality education, perception of preparedness to teach sexuality education, belief in what sexuality education concepts should be taught and the actual teaching of these concepts?
6. Concerns, Difficulties and Issues in Sexuality Education
    6.1 What do home economics teachers perceive as concerns, difficulties and issues in sexuality education?

Hypotheses

Based on the research questions these hypotheses were formulated:

1. Regarding home economics teachers' attitude toward teaching sexuality education, there is no significant difference among teachers due to age, previous training, teaching experience, school size and grade level taught.
2. Regarding home economics teachers' perception of preparedness to teach sexuality education there is no significant difference among teachers due to age, previous training and teaching experience.

3. Regarding home economics teachers' willingness to teach sexuality education, there is no sigificant difference among teachers due to age, previous training, teaching experience, school size and grade level taught.
4. Regarding home economics teachers' willingness to teach sexuality education, there is no significant relationship between the perceived support of the administration, colleagues and the community and the willingness to act on that support.
5. Regarding the teaching of sexuality education concepts, there is no significant indication of relationship between the belief in teaching sexuality education concepts and the actual teaching of those concepts.

Definition of Terms

For the purposes of this study, the following conceptual and operational definitions were used. An instrument, the "Teaching Sexuality Education in Nova Scotia Questionnaire," henceforth known as the TSE Questionnaire (Appendix A) was developed specifically to measure some of the concepts central to this study.

Conceptual Definitions

Attitude: an enduring and organized structure of a social belief that predisposes an individual to think, feel, perceive, and behave selectively toward referents or "cognitive objects" of that attitude (Kerlinger, 1984). An attitude is also viewed as being constructed of a response in a consistently favorable or unfavorable manner with respect to a given object (Fishbein & Ajzen, 1975).

Sex education: refers to learning experiences which address the human physiology related to sexual function and reproduction (Kieren, 1988; Schultz, Ralston, Rouguie, Torrie & Boyd, 1981).

Sexuality education: refers to learning experiences which reflect a wide interpretation of sexuality, including the physiology related to sexual functioning and reproduction, but also addressing feelings, values, experiences, relationships and how an individual sees himself or herself relating to the world on a physical, social, intellectual and spiritual level as a male or female person (Boyd, 1981; Kieren, 1988; Schlesinger, 1977; Schultz et al., 1981).

Sexuality education concepts: those concepts deemed as essential to a progam of sexuality education identified through a review of research conducted by sexuality educators (Arcus, 1984; Boyd, 1981; Bruess & Greenberg, 1981; Carmody, 1983; Carrera, 1971; Chamberlain, Cummings & Mendiola, 1987; Hammonds, 1982; Toothman, 1984; Schuck, 1972) and represented by the 45 concepts listed in Part II of the TSE Questionnaire.

Operational Definitions

Attitude toward teaching sexuality education: is operationally defined by the mean score for items 2 - 5, 7 - 13, and 17 of the TSE Questionnaire (Teaching Sexuality Education in Nova Scotia) as measured by a 5 point Likert scale (1 = strongly disagree to 5 = strongly agree).

Home economics teacher: refers to one who is reported teaching the home economics curriculum, as outlined by the Nova Scotia Department of Education including the foods/nutrition, clothing/textiles and family studies area, by his/her respective school boards.

Perception of preparedness to teach sexuality education: is operationally defined as a mean score for items 28 to 45, inclusive, of Part II of the TSE Questionnaire as measured by a 5 point Likert scale (1 = no emphasis at all to 5 = a great deal of emphasis).

Willingness to teach sexuality education: is operationally defined as the mean scores on items 1, 6 and 22 of Part I of the TSE Questionnaire as measured on a 5 point Likert scale (1 = strongly disagree to 5 = strongly agree).

Delimitations and Limitations

This study was delimited to home economics teachers teaching home economics in schools in Nova Scotia. Therefore, the findings may not apply to all home economics teachers or other subject teachers teaching in the area of sexuality education.

Limitations to this study include: the accuracy of the self-reported teacher attitudes toward sexuality education, as measured by the TSE Questionnaire; the potential weakness of questionnaires as a vehicle for assessing attitudes (Aikenhead, Flemming & Ryan, 1987).

Assumptions

For the purpose of this study the following assumptions were made:

1. Home economics teachers have definite attitudes toward sexuality education and these attitudes are measureable.
2. The TSE Questionnare measures attitudes toward sexuality education.
3. Responses to the TSE Questionnaire were accurate and honest.

CHAPTER II

Review of Literature

Introduction

Over time, the focus and terminology used to discuss courses of study and programs which are now called sexuality education have undergone changes. One purpose of this chapter will be to review some of the changes in language, perspective and boundaries associated with this subject as taught in schools. A second purpose for this chapter will be to highlight what has, and is, currently taking place in schools with regard to sexuality education in Canada, particularly in Nova Scotia. A third purpose is to consider the role teacher characteristics (including attitude) play in shaping willingness to teach, the belief in which concepts should be taught and the concepts actually taught in relation to sexuality education in schools.

Placing a controversial topic such as sexuality education in the school results in debate and controversy. As a result, teachers must deal with the public concerns raised, as well as their own concept of what should be taught. The nature of those concepts will be addressed at the end of this chapter along with a discussion of the framework, the Ajzen and Fishbein theory of reasoned action, as a way to understand the significance of teacher attitude in implementation of curriculum such as sexuality education for schools.

The Semantics of Sexuality Education

Confusion about the nature of sexuality education is reflected in the language used to describe these courses. Terms frequently interchanged are "family life education," "sex education" and "sexuality education." According to Schlesinger (1977):

> it is impossible to discuss family relationships and functions without including sexuality and sexual patterns involved, and equally so to discuss sexuality outside of the context of the family and its relationship. (p. xi)

A broad approach to the discussion of intimate family relationships is frequently used to define family life education while sex education is narrowed to deal more exclusively with reproduction and sexual functioning of the body (Shymko, 1978).

Elkin (1971), in a national survey of family life education in Canadian schools, reports that most family life educators "consider sex education as but one aspect of family life education" (p. 2). Both the 1977 Canadian Educational Association and the 1984 Planned Parenthood Federation of Canada survey used as a definition of family life education: "a school program or activity aimed directly at enhancing students' understanding of personal development and family living" (Déiseach, 1977; Nolté, 1984).

In a study of family life education programs conducted for the American Home Economics Association these topics were designated as basic to any family life education program:

> communication and interpersonal relationships; human growth and development; understanding self; marriage and family dynamics; human sexuality; values; decision making; health; parent education and child care; adolescent pregnancy; management of resources; consumer education; childbirth; and intergenerational understanding. (Sheek, 1984, p. 1)

Many of the topics included in this designation would fall within a sexuality education program. The fact that all these terms are used interchangeably and frequently contain overlapping content, might lead to difficulty labelling a course as one or the other. For Noble (1986) the terms "sex education" or "family life education" appear to be based on an author's "personal concept of what constitutes an appropriate program in the area of study" (p. 20).

Scales (1986) in examining paradigm shifts in sexuality education found that as views change about the nature of learning and social change; about gender, public health and personal decisions, so does our language. Profound changes in language "from using 'man' to 'person,' 'sex ed' to 'sexuality education,' 'unwanted' to 'unplanned' pregnancies, the addition of the term 'sexual learning' and the lessening of terms such as 'value free', 'epidemic,' and 'responsible behavior'" (p. 266) are semantic evidence of these changes. Sexuality education terminology, being reflective of the societal perspective from which it emerged, evolved from eradication of social diseases in the 1940s to marriage and the family in the 1960s to family life education in the 1970s and to sexuality education in the 1980s. It seems reasonable then, at this time, to define sexuality education as that which encompasses a broad range of meaning including the physiology related to sexual functioning and reproduction as well as feelings, values, experiences, relationships and how an individual relates to the world on a physical, social, intellectual and spiritual level as a male or female. Authors whose studies are reviewed here, have used a variety of terms and their terminology has been respected.

The term sex education may or may not imply a narrow perspective on the author's part.

Sexuality Education in Schools

Sexuality education is not a new or modern concept. In the United States it can be traced to the late 1880s where groups such as the American Puriety Alliance, the YMCA, the YWCA and the Child Study Association first began sponsoring lectures on sex related topics and in 1912 the National Education Association expressed the first concerns pertaining to the special training needed for sex educators (Carrera, 1971).

The first sex education programs in Canadian schools were a result of public alarm about increasing promiscuity and the rise of venereal disease after World War II (Richards, 1966). Sexuality education in Canada moved from no provincial curricula in 1964 (Canadian Educational Association, 1964) to family life education as the exception, not the norm in Canadian schools (Elkin, 1971), to, in 1976, provincial departments taking the initiative in issuing guidelines and policies for sex education, but leaving implementation up to local school boards (Monk, 1984). An increase from 21% of Canadian school districts in the 1975 - 76 study (Déiseach, 1977) to 50% of responding school superintendents having a sex education program in 1984 (Nolté, 1984), demonstrates the trend toward more acceptance of the program.

Until recent years, and only rarely now, is sexuality education listed as a separate course in Canadian schools ("Provincial Policy," 1984). However, no consistency in sexuality education may be found across the country. Incorporation of sex education in the curriculum occurs in courses such as biology, health, home economics, physical education and religious studies or in programs related to values education, human awareness, or guidance courses. Canadian schools' "early pioneers" of family life education were home economists, health and physical education teachers, biologists and those involved in religious education (Shymko, 1978).

Most Canadian studies identified home economics as a course within which sexuality education concepts were taught (Canadian Educational Association, 1964; Elkin, 1971; Ulis, 1975; Déiseach, 1977; Herold & Benson, 1979; Shymko, 1978; Noltē, 1984). A survey of Canadian provincial home economics curricula (Peterat, 1984) at the secondary level indicated that concepts which would be included in sexuality education were to be found in home economics programs across Canada whether they be called Family Studies in British Columbia, The Canadian Family in Perspective in Ontario, Personal Living Skills in Alberta, or Human Development in the Family in Newfoundland.

Sexuality Education in Nova Scotia

In Nova Scotia sexuality education concepts are incorporated into the curricula of health, home economics and biology. Health is a compulsory course in grades 1 to 9, with most of the sexuality education concepts in the program guides at the grade 8 and 9 level. Biology, an elective taught at the grade 10 and 12 levels, offers one unit on human reproduction. The family living, child development, management of personal resources and relationship units of the home economics program include concepts which are related to sexuality education (Nova Scotia Department of Education, 1986). A family life task force was established in 1983 to examine family oriented concepts in current Nova Scotia curriculum and to "translate them into a family life - life skills program which will have an identifiable status on its own" (Nova Scotia School Boards Association Newsletter, 1984, p. 4). It resulted in the creation of a new compulsory program, Personal Development and Relationships, for all junior high students, to be implemented in the fall of 1988. Sexuality education concepts were included under the unit on human growth (Nova Scotia Department of Education, 1987). The current impetus toward acceptance of this program has been the felt need to educate children about Acquired Immune Deficiency Syndrome.

In summary, human sexuality education is an accepted component of various course offerings in Nova Scotia, but it is not taught as a separate entity. New programs are being initiated, and teachers from various teaching backgrounds are being called on to implement them.

Teaching Sexuality Education

Information About Sexuality

Individuals learn about sexuality throughout their lives from a wide variety of sources. According to Laycock (1979), Walters and Walters (1983), Alexander (1984), Herold (1984), Steinbacher (1984), and Plath (1987), the primary place for sex education to occur is in the home with parents as teachers. However, parents are willing to share that responsibility (MacLeod, 1980; Herold, 1984) and are supportive of school programs (Seeley, 1969; Christian, 1975; Elam, 1983; Monk, 1984; "Parents Approval," 1985). A societal concern brought on by increasing incidents of teenage pregnancy, abortion and sexually transmitted diseases, is that parents have been ineffective in providing their children with sexuality education (Roberts, 1980; Zelnik & Kim, 1982). Adolescents want sexuality education as part of school programs (Brennan, Petty & Schlosberg, 1981; Alberta Education, 1985; "Gallup Poll," 1985) and are willing to allow the schools to provide it (Seeley, 1969; Pisesky, 1971; Herold, Kopf & DeCarlo, 1974, Herold, 1984). Research indicates that peers play a significant role in the acquisition of adolescent sexuality information (Meikle, Pearce, Peitchins & Psych, 1981; Thornburg, 1981b; Obstfeld & Meyers, 1984, "Gallup Poll," 1985; King, Robertson & Warren, 1985). The accuracy of adolescent sexuality information is a concern when peers are the primary information source (King, Robertson, Warren & Fuller, 1984).

An examination of adolescent sex information learning led Thornburg (1981a) to conclude that:

> multiple environmental stimuli, earlier physical maturation, earlier peer involvement, increased early adolescent sexual involvement, and earlier learning of sex information all point to the fact that a more systematic and accurate presentation of sexual concepts is needed among today's adolescent. (p. 277)

This accurate and systematic presentation of sexuality concepts could occur within the school with teachers as sexuality educators. Concern about high teenage pregnancy and abortion rates or about sexually transmitted diseases is frequently the stimulus for sexuality education decisions. Dunn (1982) maintains that if these are the primary reasons for the establishment of sex education courses they might be counter-productive to the development of sound and effective sex education in the school because of the narrow and incorrect understanding of human sexuality they promote. To isolate one issue, such as Acquired Immune Deficiency Syndrome and "focus only on disease is a backward approach" (Cosman, 1987, p. 7). Public support for inclusion of controversial issues such as contraception is there (MacLeod, 1980; Meikle et al., 1980; Herold, 1984) but at the same time there is pressure to control the information presented (Steinbacher, 1984).

Although research reveals that the majority of the public is in favor of sexuality education being taught in the schools, answers to questions about how, what, when, and who will teach vary enormously. An essential ingredient in an effective school sexuality program is the attitude of the teacher presenting the course because not only are facts and information components presented but also, as suggested by Boyd (1981), attitudes toward sexuality. Yet little is known about teachers' attitudes toward school sexuality education or the effect they have on programs.

Teacher Preparation

The qualifications of those teaching sexuality education programs have been a concern since the inception of programs in the early 1900s (Carrera, 1970). That teachers feel inadequately prepared to teach family life education and human development is evident in the literature (Elkin, 1971; Evenson, 1973; Bowen, 1974; Ryan & Dunn, 1979). An argument which administrators must counteract, or may use, when considering the establishment of sexuality education programs, is that "teachers may be unsuitable or unqualified to teach sex education" (Noble, 1986, p. 21). It is suggested that the most neglected area in family life education is the preparation of teachers (Herold, 1984; Luckey, 1978). A Canadian study by the Vanier Institute of the Family (Elkin, 1971) reported 42% of family life educators had no previous training, 31% questionned the value of their training and only 27% had participated in an education inservice on the topic. Of Canadian school administrators surveyed, 56% felt they lacked qualified personnel (Elkin, 1971), while a 1984 survey of 782 teachers of family life education in Canada found that the majority of respondents, 76%, were comfortable in teaching the topic but only 53% had taken courses to prepare them to teach in the area. For the latter, only 11% had actually taken courses in human sexuality (Nolté, 1984).

Numerous people have tried to identify those qualities that make effective sexuality education teachers. For Kuchta (1985), teachers must "be knowledgeable of the subject, have effective communication skills, and feel comfortable teaching human sexuality" (p. 76). Characteristics suggested as essential for a sexuality educator are ability to communicate, acceptance of sexuality, empathy, a sense of humor, good teaching techniques and female and married status (Juhasz, 1970). However, recent research indicates that sex and marital status are not important qualifiers (Carrera, 1972; Munson, 1976; Carrera, 1981). When teachers were asked to judge adequate preparation for sexuality education they perceived it as including knowledge, group processes, teaching and sexuality resolution (Munson, 1976).

Studies by Rubin (1970) and Dereli (1973) supported the idea that sexuality educators were more accepting of their own and other's sexuality than non sex educators. According to Reed and Munson (1976), teachers or educators of sexuality education must have a positive attitude toward their own sexuality before attempting to teach in this highly sensitive area.

In order to develop consistency in teacher education and to provide data which described the philosophy, objectives, and approaches relating to the training and preparation of senior high school sex educators, Carrera (1970) developed a set of guidelines to address the critical need for special training in sex education. Carrera identified specific skills, competencies, and experiences of a priority nature to the preparation of effective sex educators. A need for knowledge of the language of sexuality, of methods and materials of the communication process, of dating, courtship and mate selection process, of the psychology of adolescence, of sex related to marriage and family living and of the male and female reproductive anatomy and physiology were rated as essential to the teaching effectiveness of the sex educator as well as it being critical to develop skills in group discussion. Carrera did not see age, sex, religion, marital status or experience as a parent, as being essential to the performance of the duties of the high school sex educator. Professional competencies of sexuality educators as identified by Yarber and McCabe (1981) would include:

> ability to communicate warmly and effectively, empathy and respect for youth, accurate knowledge of the factual material of the area, ability to relate to students in a trusting and open way, ability to treat appropriate materials confidentially, skill in creating a supportive classroom environment and an understanding of individual strengths and limitations. (p. 288)

MacDougall (1982) expressed the belief that a teacher must be "willing to develop strong skills in interpersonal relationships -- be comfortable with his/her own sexuality -- and be willing to teach in the area of human sexuality" (p. 12).

Research indicated that a good background in subject knowledge yields a more positive attitude toward the subject by teachers (Stern & Keislar, 1977). In developing a scale to assess 625 elementary teachers' attitudes toward contraceptive education, Plonsky (1975) found a significant relationship between positive contraceptive education attitudes and adequate knowledge of birth control. Those who had received formal information on contraception, and who were under 35 years of age were more positive in contraceptive attitude and more knowledgeable than others. The study also reported a more positive attitude toward birth control by never married teachers when compared with their married counterparts.

A study to assess the sexuality attitudes of 191 Iowa home economics teachers (Boyd, 1981) found that they felt competent to teach public high school sexuality education but perceived limited support for sexuality education in their schools. They felt positive about their own sexuality, perceived themselves as having more liberal than traditional sexual-behavior codes, and saw themselves as being individualistic in their feelings about what is desirable as a body image. Teachers felt more competent to teach sexuality education when they felt positive about their own sexuality, perceived school-district support for sexuality education, and when they assessed their own sexuality education as adequate.

A survey of prospective Canadian teachers and graduate nurses concluded that both groups lacked basic knowledge of the psychology of sex and held many misconceptions about veneral disease, masturbation and contraception (McCreary-Juhasz, 1967). Alberta teachers reported that males and those teachers with more teaching experience felt competent handling religious views on sex, whereas females and those teaching in the public school systems felt competent handling abortion and contraception (Evenson, 1973). Seeley (1969) in a survey of 561 Alberta teachers', parents' and students' opinions on sex education reported only 25.6% of the teachers felt qualified to conduct sex education classes but 55% said they would teach sex education if required to do so. In a similar vein, knowledge of the biology of reproduction was found to be positively related to teacher willingness to teach and independent of sex, marital and parenting status, teaching experience and grade level taught (Kent, Abernathy & Middour, 1971).

Benell (1969) found teachers are more prone to misconceptions in the sociopsychological topics of human sexuality rather than the biological topics. In a study of 543 California teachers, those teachers least willing to teach controversial sex-related topics reported the greatest number of misconceptions about the subject. Koblinsky, Weeks and Cook (1985) in a study of California family life programs found that home economics teachers who had obtained preservice and continuing education courses in family life were significantly more likely than other teachers to volunteer to teach family life. Koblinsky et al. (1985) concluded that since teachers who are uncomfortable teaching sensitive areas are less effective; improved teacher preparation is recommended since "willingness to teach" is positively related to both perceived and objectively measured knowledge of human sexuality. When training programs in sexuality were looked at, it was found that they can be an effective way of increasing knowledge and changing attitudes of professional educators (Payne, 1976; deLemos, 1977; Smith, Flaherty & Welch, 1981; Carmody, 1983; Carter & Frankel, 1983; Schultz & Torrie, 1984). That home economics teachers strive to improve their instructional techniques, are willing to update knowledge, and increase professional growth is supported in the literature (Hughes & Dougherty, 1977; Nova Scotia Home Economics, 1984; Koblinsky et al., 1985). Although it cannot be generalized to other subject areas, based on the trends reported for home economics teachers, it seems that the level of knowledge of the subject is a predictor of attitude toward sexuality education.

Concepts for the Curriculum

Though knowledge is a predictor of attitudes toward sexuality education another interesting aspect of the curriculum is the concepts teachers choose to teach. Inclusion of topics in sexuality education courses is frequently problematic. According to Yarber and McCabe (1981), "teacher's attitude toward sexuality is apparently the most important personal factor in influencing inclusion of topics" (p. 290). Chamberlain, Cummings and Mediola (1987) go further in saying, "What is actually taught seems to vary according to the academic background and expertise of the individual teacher and the importance this teacher places on particular concepts" (p. 44).

In a study of the importance and actual teaching of 52 sexuality education concepts by 201 home economics teachers, Chamberlain et al. (1987) found, not surprisingly, that the concepts teachers rate as most important are most frequently taught and those rated as least important are least frequently taught. A ranking of teaching of 25 sexuality topics by 191 Iowa home economics teachers found the most emphasized topics to be: values clarification, prenatal care, adolescent social development and birth control. The least emphasized topics were: masturbation, self-examination of breasts and testicles, homosexuality and rape (Boyd, 1981). Home economics teachers are significantly more likely than their colleagues to address issues like: dating and peer relationships, consequences of teen pregnancy, sex roles, decision making and problem solving, communication, and values related to children and families while avoiding issues like sexually transmitted disease (Koblinsky et al., 1985).

A study by Chamberlain, Couch, Cummings and Barrington (1983) of 250 home economics teachers in Texas examined selected aspects of human sexuality education as perceived and taught by the teachers. Human sexuality concepts were perceived to be important for inclusion in the secondary home economics curriculum. The study concluded that home economics teachers may be more likely to teach concepts that are cognitive in nature and those that are not particularly controversial. Value-laden, and therefore controversial concepts like abortion, contraceptive use and emotions related to sexual intercourse were among those least frequently discussed in class. Ranked as both the most important and the most frequently taught concepts were: nutrition during pregnancy, drugs, alcohol and tobacco use during pregnancy, and dating as preparation for mate selection. The study noted as significant the fact that the most important and frequently taught concepts were female-related (all involve some aspect of pregnancy), and those least important or least frequently taught were more relevant for males (i.e., contraceptive use, sex offenses and items related to male puberty). The study concluded that human sexuality, as taught by home economics teachers in Texas, tends to be female-intensive.

If preparedness to teach is influential in the selection of concepts, then research by Schulz, Boyd and Fanslow (1983) on in-service needs of teachers related to sexuality education found home economics teachers perceived themselves as generally knowledgeable regarding the female reproductive system, health care during pregnancy, sexually transmitted diseases, fetal development, sexual health and the fertility cycle and wanted more information on drugs and male reproduction. Rasco and Cummings (1984) reporting on home economics education majors ranking of 45 sexuality education concepts as to preparation to teach, found courses in family relations, child development, and biological science types of courses reported as being of most benefit to teacher preparation.

In selection and presentation of sexuality education concepts teachers report fewer problems with the teaching of facts versus the presentation of value positions (Herold & Benson, 1979). Home economics teachers consider moral or value issues in their classes which relate to family life, sex education and parenting, but seldom with regard to housing, foods or clothing (Moeller, 1982). In the past, biological sexuality was viewed as "the" domain of sex education but that is not enough for Gilgun and Gordon (1983) who believe that "sexuality education cannot be taught in a value free context" (p. 29). A concern addresssed by Herold (1984) about the importance of teacher education is that "inadequately prepared teachers are less able to distinguish between value statements and statements of fact and will often state value assertions which may not have factual validity" (p. 173).

In conclusion, attitudes toward both sexuality and sexuality education can influence a teacher's willingness to teach sexuality education and the selection and presentation of concepts within a sexuality education program. Those studies which lead one to this conclusion have been mainly conducted with home economics teachers in the United States as subjects. Whether or not the findings would hold true for Canadian teachers and/or teachers in other subject areas is a matter for further study.

Attitude As A Concept Related to the Teaching of Sexuality Education

Throughout this chapter, reference has been made to the importance of teacher attitude toward sexuality education, and the concepts therein. This is not surprising, for, according to Kerlinger (1984) attitudes are a significant part of the personality. They are:

> efficient psychological mechanisms that strongly influence social behavior and they represent the emotional, motivational, and cognitive reactions of people to the social "objects" of their environment and their predispositions to act toward these social objects. (p. 1)

Attitudes can be an important influence on individual social behavior, guiding it in a particular direction as well as lending integrated and summary meaning to ideas and actions related to that object.

Fishbein and Ajzen (1975) believe that knowledge of an attitude will permit prediction of behavior because they view attitude as a "latent or underlying variable that is assumed to guide or influence behavior" (p. 8). For Shaw and Wright (1967) the attitude construct is frequently utilized to account for consistency in social behavior and their definition recognizes it as "a relatively enduring system of evaluative concepts or beliefs which have been learned about the characteristics of a social object or class of social objects" (p. 3). For Ajzen and Fishbein (1980) a theory of "reasoned action" can be used to predict, explain and influence human behavior. This theory is based on the premise that "human beings are usually quite rational and make systematic use of the information available to them" (p. 5). The theory suggests that a person's behavior is determined by his or her intention to perform that behavior and that this intention is in turn a function of his or her attitude toward the behavior and the individual's subjective norm (see Figure 1). Beliefs are viewed as underlying a person's attitudes and subjective norms, and therefore

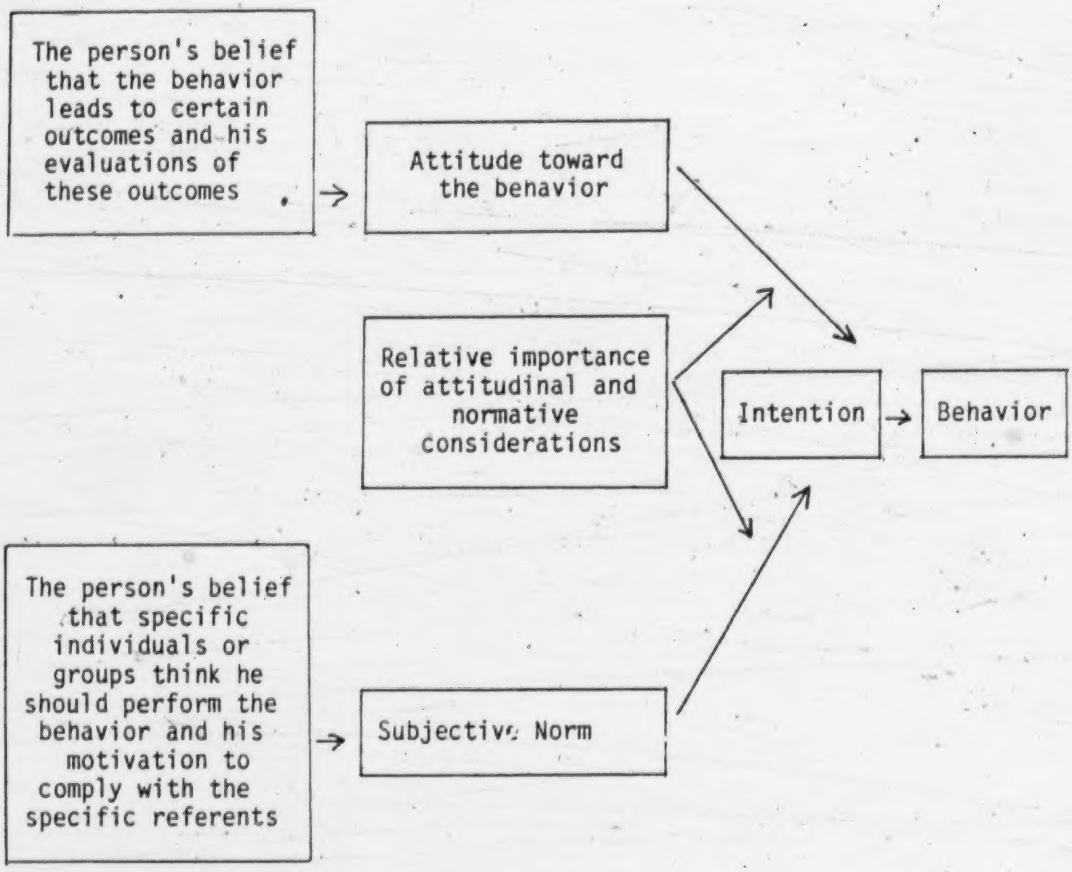
The person's belief that the behavior leads to certain outcomes and his evaluations of these outcomes
Attitude toward the behavior
Relative importance of attitudinal and normative considerations
Intention
Behavior
The person's belief that specific individuals or groups think he should perform the behavior and his motivation to comply with the specific referents
Subjective Norm

Figure 1

Factors Determining A Person's Behavior
(Ajzen & Fishbein, 1980, p. 8. Reprinted by permission of Prentice-Hall, Inc., Englewood Cliffs, NJ)

ultimately determine intentions and behavior. Figure 1 shows how the causes of behavior may be traced through a series of intervening constructs back to a person's beliefs. Oskamp (1977) concludes that Fishbein and Ajzen's viewpoint concerning attitudes, beliefs and behavioral intentions is preferable to other theoretical views regarding attitude components while Allgeier (1983) evaluates the Fishbein and Ajzen model for studying belief-behavior links as "one of the most sophisticated models for understanding and predicting social behavior" (p. 197).

An adaption of the Ajzen and Fishbein model was used by Allgeier (1983) to examine contraceptive behavior and could be useful as a means of understanding the relationship between beliefs, intentions and teacher's sexuality education behavior. In the Ajzen and Fishbein model, a person's behavior, behavioral intention, attitude and subjective norm are examined in four stages. In light of the discussion of the importance of teacher attitude in sexuality education, it is possible to explore the stages of the Ajzen and Fishbein model in order to generate hypotheses about the significance of teacher attitudes in relation to the subject being taught, particularly a controversial subject such as sexuality education. The stages are as follows and the hypothesis that might be generated from the discussion thus far are underlined.

1. A person's behavior is a function of his or her intention to perform that behavior. (A teacher's teaching of sexuality education concepts in a class is a function of his or her intention to teach sexuality education).

2. Behavioral intentions are in turn, a function of:
   - (a) A person's attitude toward an act. (A teacher's intention to teach sexuality education is a function of his or her attitude - positive or negative - toward teaching sexuality education).
   - (b) The person's subjective norms, that is, his/her perceptions of what significant others think should be done with respect to the act in question. (A teacher's perception of the opinion of people who are important to her or him with respect to teaching sexuality education form part of that person's subjective norm).
3. An individual's attitude toward the act is a function of:
   - (a) his or her beliefs about the consequences of performing the act. (A teacher's attitude toward teaching sexuality education is a function of his or her belief about the consequences of sexuality education. For example, leads to better informed students or leads to promiscuity).
   - (b) the person's evaluation of these consequences. (All the above consequences may be evaluated positively or negatively depending upon whether the teacher does or does not want to teach sexuality education, or does or does not want better informed students).
4. Finally a person's subjective norms are a function of:
   - (a) his or her perception of what significant reference persons think should be done regarding behavior. (A teacher believes that the principal or community wants him or her to teach

sexuality education or specific sexuality education concepts).

(b) his or her motivation to comply with these referents. (The teacher does or does not want to comply with what is perceived as a principal's or community's wishes).

If a relationship between attitude and behavior exists, then for curriculum planners who wish to design and implement sexuality education programs, an understanding of teacher attitudes toward sexuality education is very important. In the study which follows, the view will be adopted that teacher attitudes toward engaging in a particular behavior, for example teaching sexuality education, will contribute to the teacher's intention to engage in that behavior. While this study will not fully apply the Ajzen and Fishbein model, it does use a conceptual view of attitude as an evaluative term, expressing a positive or negative effect for an object, based on beliefs about that object. Implicitly then, attitude is viewed as likely to affect behavior, in this case willingness to teach sexuality education. Clearly, attitude seems an integral concept in the understanding of the characteristics and the behavior of those who teach sexuality education. The findings reviewed in the literature clearly support the notion that understanding the teacher's attitude toward the subject will further the understanding of who teaches what willingly. This is important for curriculum developers to know because successful implementation of curriculum may well depend on the match between what teachers believe they can and should teach.

CHAPTER III

Research Methodology

This chapter includes a description of the sample selection, the survey instrument design and the methods for data collection and data analysis.

Sample Selection

The survey population selected for study was all home economics teachers in Nova Scotia. Permission to survey, and a listing and mailing address of their respective teachers was received from each of the 22 provincial school boards. All 253 home economics teachers, as identified by their school boards as instructing home economics programs, including the foods/nutrition, clothing/textiles and family studies area, on either a full or a part time basis were surveyed.

Survey Instrument Design

A self-administered questionnaire (TSE Questionnaire, Appendix A) was designed to, along with the collection of demographic data and data about facets of teaching sexuality education, to measure attitudes toward sexuality education. A uni-polar, five point Likert scale was used to measure the variables with a higher mean score indicative of a more positive response toward sexuality education. In cases of "no" response to a particular item, the response is classified as "other" and the total responses including "other" are used in the calculation of the percentage response to each category on the Likert scale (including other).

Survey questions were derived from a review of current literature in sexuality education (Arcus, 1979, Boyd, 1981; Carrera, 1970; Carmody, 1983; Chamberlain, Couch, Cummings & Barrington, 1983; Chamberlain et al., 1987; Hammonds, 1982; M. Rasco, [personal communication, 1986]; Sheek, 1984; Toothman, 1984). Five subscales were developed to measure different facets of sexuality education: attitude toward sexuality education (Items 2 - 5, 7 - 13, 17); willingness to teach sexuality education (Items 1, 6, 22); perception of preparedness to teach sexuality education (Items 28 - 45). These were approached in Part I of the TSE Questionnaire. Belief as to which sexuality education concepts "should be taught" and the "actual teaching" of these concepts was considered in Part II. Items 18 - 27 (Part I) were designed, on the basis of procedures outlined by Ajzen and Fishbein (1980), to test their theory of reasoned action. Items 28 - 45 (Part I), were designed to evaluate a teacher's "perception of preparedness to teach" sexuality education, based on an adaptation of Boyd's (1981) questionnaire evaluating the sexuality attitudes of secondary home economics teachers. Boyd's extensive work resulted in the development of questionnaire items which yielded in a reliability of .90 for the "personal preparedness" items.

Part II of the TSE Questionnaire listed 45 sexuality education concepts and asked for a rating of belief as to whether these concepts should be taught and a rating as to the actual teaching of these concepts. The concepts chosen were those used most frequently in the sexuality education literature (Arcus, 1984; Boyd, 1981; Bruess & Greenberg, 1981; Carrera, 1971; Carmody, 1983; Chamberlain et al., 1983; Chamberlain et al., 1987; Hammonds, 1982; Rasco & Cummings, 1984; Schultz & Torrie, 1984; Schuck, 1972; Toothman, 1984) and those concepts for whom previous research already reported high reliabilities (i.e., Chamberlain et al., 1983, reported a .93 reliability for the 52 concepts of their Human Sexuality Concepts Scale).

Part III collected demographic data. Open-ended questions were also included to allow respondents the freedom to express in their own words concerns, difficulties or issues which they saw as relevant to sexuality education. The layout of the questionnaire followed the format proposed by Dillman (1978).

Validity

Cates (1985) defines content validity as "the extent to which an instrument covers content which is appropriate to the research study, to the samples and population to be studied . . . and to the curriculum . . . to which the subjects have been or will be exposed" (p. 123). Content validity was examined by two teachers and two nurses involved in the field of sexuality education for youth. As a result, four of the sexuality education concepts were reworded, two items were removed and one addition was made. A pilot study of the questionnaire conducted with 15 high school teachers of various disciplines resulted in the rewording and reorganization of some questions to improve clarity.

Reliability

Reliability of an instrument refers to the consistency with which an instrument produces equivalent scores (Cates, 1985). Cronbach's coefficient alpha (Anastasi, 1976) was calculated as a measure of internal consistency on each of the five subscales within the TSE Questionnaire. The estimates of reliability are presented in Table 1. As noted in Table 1 the estimates of reliability for the TSE Questionnaire are high. These high reliabilities may be attributed in part to having been built on the foundation of questionnaires developed by Boyd (1981) and Chamberlain et al. (1983) whose work resulted in the development of questionnaire items which yielded a high reliability.

Data Collection

The questionnaire design and implementation of the mail survey followed the "Total Design Method" suggested by Dillman (1978). A total of 253 questionnaires were mailed to Nova Scotia home economics teachers during October 1986. Returned questionnaires were identified by a coded number and upon receipt of the questionnaire the subject's name was checked off a master list. The initial mailout was followed by two subsequent mailouts to non-respondents. Anonymity was guaranteed to all respondents. The mail packet contained: the questionnaire, a letter of introduction, a self-addressed stamped envelope, and a post card. To encourage a high response rate, a copy of the results was promised to all those who returned the post card requesting the information. Of the 194 respondents who returned the questionnaire, 137 (70.6%) requested a copy of the results. The fact that the post card could be mailed separately from the questionnaire added further to the guarantee of anonymity. Data for this study was

Table 1

Estimates of Reliability for Subscales of TSE Questionnaire

Subscale		Cronbach's Alpha
1	Attitude Toward Sexuality Education	.77
2	Perception of Preparedness to Teach Sexuality Education	.93
3	Sexuality Education Concepts Which Should be Taught	.95
4	Sexuality Education Concepts Which Are Actually Taught	.96
5	Willingness to Teach Sexuality Education	.90
Cronbach's Alpha for Total Test		.97

collected from October 1986 to December 1986. The survey sample is presented in Table 2. Examples of correspondence with school boards, the introductory and follow-up letters and post card are found in Appendix C.

Data Analysis

Data were processed and analyzed at the Division of Educational Research Services (DERS), University of Alberta using the SPSS (Statistical Package for the Social Sciences) computer program (Norusis, 1983). Frequency distribution, analysis of variance and chi-square were used to analyze the quantitative component of the study. Open-ended questions were analyzed by a method of content analysis suggested by Atkins (1984). All responses to a question were read and recorded. The item responses were examined and as the response suggested categories these were created and responses placed in them. Key themes were derived from the categories identified.

Table 2

The Survey Sample

	Number	Percent
Questionnaires mailed out	253	100.00
Questionnaires undelivered	2	.79
Effective mailout	251	100.00
Questionnaires completed	194	77.29

CHAPTER IV

Research Findings

Introduction

Research findings were organized into sections: a description of the sample; a reporting of the attitudes toward sexuality education, the willingness and preparedness to teach sexuality education, the importance of sexuality education concepts, the influence of area of specialization on the teaching of sexuality education, and an examination of concerns, difficulties and issues related to sexuality education.

Description of the Sample

A total of 194 Nova Scotia home economics teachers, out of a possible total of 251, participated in this study, giving a participation rate of 77.29%. As the number of home economics teachers in Nova Scotia is small, the entire population was included in this study which was carried out over the 1986-1987 school term. All of the 22 district school boards within the Province of Nova Scotia were represented. The participants were 99% female (n = 191) and 1% male (n = 2). Marital status was reported as: never married 12% (n = 23), married 77% (n = 148), and widowed, separated or divorced 11% (n = 21). Results indicated that the majority of these teachers, 72% (n = 138), spent all of their time teaching home economics, while 23% (n = 43) spent more than 50% of their time in home economics. Only 5% (n = 10) reported a teaching time of less than 50%. The school setting reported was: rural 44% (n = 85), town 26% (n = 50), city 25% (n = 47), and other 5% (n = 9). Most schools, 53% (n = 101) had one and one-half to two home economics teachers, while 24% (n = 47) of schools had one home economics teacher or less and 23% (n = 43) had two and one-half or more home economics teachers.

Membership in professional associations was reported with 14% (n = 27) members of the Canadian Home Economics Association (CHEA), 64% (n = 124) members of the Nova Scotia Home Economics Association (NSHEA), 77% (n = 150) members of the Home Economics Teachers Association (HETA) and 7% (n = 14) members of such associations as the Nova Scotia Nutrition Council, the Consumer's Association, the Women's Health Education Network and local home economics associations. Sixty-eight percent of respondents (n = 129) had taken a course in human sexuality or sexuality education, while 32% (n = 62) had never taken a course. If courses in sexuality education were available, 69% (n = 130) would take such a course, 10% (n = 19) would not, and 21% (n = 40) were undecided.

Frequency distributions for the demographics used in this study: age, grade level taught, school size, teaching experience, teacher training, and area of specialization are found in Tables 3, 4, 5, 6, 7 and 8. For some questionnaire items not all individuals responded, thus the total number of responses was not always 194.

Attitudes Toward Sexuality Education

The first research question concerned home economics teachers' attitudes toward teaching sexuality education. The percentage

Table 3

Respondents Classified by Age

Age (n = 194)	Number	Percent
20-29	21	10.8
30-39	105	54.1
40-49	42	21.7
50-59	24	12.4
Over 60	0	0.0
No response	2	1.0
Total	194	100.0

Table 4

Respondents Classified by Teacher Education

Teacher Education (n = 194)	Number	Percent
Certificate	44	22.7
University Degree	125	64.4
Master's Degree	14	7.2
Other	8	4.1
No response	3	1.6
Total	194	100.0

Table 5

Respondents Classified by Grade Level Taught

Grade Level Taught (n = 194)	Number	Percent
Junior High (7-9)	125	64.4
Senior High (10-12)	25	12.9
Junior-Senior High (7-12)	39	20.1
Other	4	2.1
No response	1	.5
Total	194	100.0

Table 6

Respondents Classified by School Size

School Size (n = 194)	Number	Percent
Less than 500	98	50.5
501 to 1,000	60	30.9
Over 1,000	34	17.6
No response	2	1.0
Total	194	100.0

Table 7

Respondents Classified by Years of Teaching Experience

Years of Teaching Experience (n = 194)	Number	Percent
1-10 years	56	28.9
11-20 years	110	56.7
21-30 years	23	11.9
Over 30 years	4	2.1
No response	1	.5
Total	194	100.0

Table 8

Respondents Classified by Area of Specialization

Area of Specialization (n = 238)*	Number	Percent
Specialized in foods and nutrition	33	13.9
Specialized in clothing and textiles	34	14.3
Specialized in family studies and/or consumer studies	30	12.6
Specialized in general study of home economics	130	54.6
Training not in home economics area	6	2.5
Other (Specify)	5	2.1
Total	238	100.0

* Multiple responses to areas of specialization.

frequency distribution, the mean and the standard deviation for each item of Part I of the TSE Questionnaire, questions 1 to 27 inclusive, are presented in Table D-1 (Appendix D). The degree of support for the various items reported below was obtained by adding the strongly agree and agree responses to the supportive statements and strongly disagree and disagree to the negative statements.

Home economics teachers are strongly in favour of sexuality education with 95.4% reporting a favorable attitude (Item 5). The majority of respondents, 93.3% agreed to teaching sexuality education in the school (Item 3), while 95.3% disagreed that it should be taught only at home (Item 2). A place somewhere in the school curriculum was favored by 91.2% of respondents (Item 10), while 76.3% would include it in the home economics curriculum (Item 8), and 59.8% in the health curriculum (Item 9).

That schools should teach only the physiological facts related to sexuality was disagreed with by 81.5% of the survey population (Item 13). Ninety-six percent placed value on teacher knowledge about sexual health care (Item 14) and teacher knowledge about factors involved in the decision to parent was supported by 96.9% of respondents (Item 15). For 92.8% of respondents birth control information should be included in sexuality education (Item 12) while 80.5% would include sexual values (Item 11). When presenting sexuality education programs 86.1% agreed that parents should review topics covered (Item 17). Only 60.8% believed in co-educational sexuality education classes (Item 7) while a school administration supportive of sexuality education was reported by 65.9% of respondents (Item 16).

The significance of the demographic variables of age, teacher education, years of teaching experience, school size and grade level taught for the subscale "Attitude Toward Sexuality Education" (Items 2-5, 7-13, 17) was tested with the following hypothesis:

> There is no significant difference with regard to attitudes toward teaching sexuality education among the different categories of:
> a) age
> b) teacher education
> c) years of teaching experience
> d) school size, and
> e) grade level taught.

One-way analysis of variance resulted in no significant difference at the 0.05 level of probability among the categories of age, teacher education and years of teaching experience. The null hypotheses were not rejected and findings indicate that, for this group, age, teacher education and years of teaching experience, did not influence attitude toward teaching sexuality education. Descriptive statistics may be seen in Tables D-2, D-3 and D-4 (Appendix D).

A significant difference was found among the different categories of school size and grade level taught. One-way analysis of variance found school size (F = 5.3257, Table 9) and grade level taught (F = 3.2892, Table 10) significant at the 0.05 level of probability.

A Scheffé test identified the means that were significant. The significant difference found for school size was between those teachers who teach in a school of 500-1,000 students (Mean = 48.5333) and those who teach in a school of over 1,000 students (Mean = 52.5294, Table 11). The significant difference found for grade level taught was

Table 9

Analysis of Variance of Attitude Toward Teaching Sexuality Education for Respondents in Different Categories of School Size

Source	Sum of Squares	Mean Square	Degree of Freedom	F
Between Groups	346.7924	173.3962	2	5.3257*
Within Groups	6153.5774	32.5586	189	
Total	6500.3698			

* Significant at $p < .05$

Table 10

Analysis of Variance of Attitude Toward Teaching Sexuality Education for Respondents in Different Categories of Grade Level Taught

Source	Sum of Squares	Mean Square	Degree of Freedom	F
Between Groups	323.0060	107.6687	3	3.2892*
Within Groups	6186.6624	32.7337	189	
Total	6509.6684			

* Significant at $p < .05$

Table 11

Means and Standard Deviations for School Size Categories on Attitudes Toward Teaching Sexuality Education

	N	%	Mean	Standard Deviation
Group 1 (under 500 students)	98	51	49.9082	4.8484
Group 2 (500-1,000 students)	60	31	48.5333	6.9854
Group 3 (over 1,000 students)	34	18	52.5294	5.4896

between those teachers who teach Junior High (Mean = 49.1040) and Senior High (Mean = 52.7200, Table 12).

The null hypothesis concerning the categories of school size and grade level taught was rejected. Findings indicated that attitudes toward teaching sexuality education were influenced by school size and grade level taught with those who teach in larger schools (over 1,000 students), and in higher grades (Senior High) having a more positive attitude toward teaching sexuality education that those who teach in schools with 500 to 1,000 students and those who teach Junior High.

Willingness To Teach Sexuality Education

The second research question concerned home economics teachers' willingness to teach sexuality education. The percentage frequency distribution, the mean and standard deviation for the subscale "Willingness To Teach Sexuality Education" (Items 1, 6 and 22) are presented in Table D-1 (Appendix D), The degree of support for the items reported below was obtained by adding the strongly agree and agree responses to the supportive statements.

If given the opportunity, 80.4% of home economics teachers would be willing to teach sexuality education (Item 1). While 67.1% of the teachers believed they should teach sexuality education (Item 22), only 64.4% felt they were personally ready to teach sexuality education (Item 6).

The significance of the demographic variables of age, teacher education, years of teaching experience, school size and grade level taught for the subscale "Willingness To Teach Sexuality Education"

Table 12

Means and Standard Deviations for Grade Level Taught Categories on Attitudes Toward Teaching Sexuality Education

	N	%	Mean	Standard Deviation
Group 1 (Junior High 7-9)	125	65	49.1040	5.6978
Group 2 (Senior High 10-12)	25	13	52.7200	6.1679
Group 3 (Junior/Senior High 7-12)	39	20	50.9744	5.5226
Group 4 (Other)	4	2	49.5000	5.4467

(Items 1, 6, and 22) were tested with the following hypothesis:

> There is no significant difference with regard to willingness to teach sexuality education among the different categories of:
> a) age
> b) teacher education
> c) years of teaching experience
> d) school size, and
> e) grade level taught.

One-way analysis of variance resulted in no significant difference at the 0.05 level of probability among the categories of age, years of teaching experience and school size. The null hypotheses were not rejected and findings indicate that, for this group, age, years of teaching experience and school size did not influence willingness to teach sexuality education. Descriptive statistics may be seen in Tables D-5, D-6 and D-7 (Appendix D).

A significant difference was found among the different categories of teacher education and grade level taught. One-way analysis of variance found teacher education (F = 3.4767, Table 13) and grade level taught (F = 3.3874, Table 14) significant at the 0.05 level of probablity.

However, a Scheffé test to identify the means that were significant, found that no two-groups were statistically different at the 0.05 level of probability (Table 15, Table 16). The level of probability reported by one-way analysis of variance for teacher education (F = 3.4767, p = .0172) and grade level taught (F = 3.3874, p = .0192) did not allow prediction at any level of confidence which group, between the different categories of teacher education or grade

Table 13

Analysis of Variance of Willingness to Teach Sexuality Education for Respondents in Different Categories of Teacher Education

Source	Sum of Squares	Mean Square	Degree of Freedom	F
Between Groups	82.1360	27.3787	3	3.4767*
Within Groups	1473.5079	7.8797	187	
Total	1555.6440			

* Significant at $p < .05$

Table 14

Analysis of Variance of Willingness to Teach Sexuality Education for Respondents in Different Categories of Grade Level Taught

Source	Sum of Squares	Mean Square	Degree of Freedom	F
Between Groups	80.5296	26.8432	3	3.3874*
Within Groups	1497.7088	7.9244	189	
Total	1578.2383			

* Significant at $p < .05$

Table 15

Means and Standard Deviations for Teacher Education Categories on Willingness to Teach Sexuality Education

	N	%	Mean	Standard Deviation
Group 1 (Teacher's Certificate)	44	23	10.5909	3.3153
Group 2 (University Degree)	125	66	11.6160	2.7024
Group 3 (Master's Degree)	14	7	12.5714	2.0273
Group 4 (Other)	8	4	13.3750	2.4458

Table 16

Means and Standard Deviations for Grade Level Taught Categories on Willingness to Teach Sexuality Education

	N	%	Mean	Standard Deviation
Group 1 (Junior High 7-9)	125	65	11.0160	2.8112
Group 2 (Senior High 10-12)	25	13	12.3600	3.2899
Group 3 (Junior/Senior High 7-12)	39	20	12.3846	2.3799
Group 4 (Other)	4	2	12.2500	3.7749

level taught, were significant in influencing willingness to teach. The null hypothesis was rejected at 0.05 level of significance indicating that willingness to teach was influenced by teacher education and grade level taught. Specifics of teacher education and grade level taught were not able to be identified as to what exactly influenced willingness to teach.

Willingness to teach sexuality education also involves the perception of support for the teaching of sexuality education. The relationship between perceived support for sexuality education from administration, colleagues and the community and the willingness to act on that support were tested by the following hypothesis:

> Regarding willingness to teach sexuality education there is no significant relationship between perceived support of colleagues, school administration and community and the willingness to act on that support.

Chi-square was used to test this relationship for significance at the 0.05 level. The percentage frequency distribution, the mean and the standard deviation for TSE Questionnaire (Items 19-20, 24-26) used to te st relationships are presented in Table D-1 (Appendix D).

The relationship between colleagues thinking sexuality education should be taught (Item 19) and doing what colleagues think should be done (Item 24) had a chi-square value of 21.62683, with 4 degrees of freedom. At a 0.05 level of significance the critical value was 9.48. The hypothesis therefore was rejected indicating that teachers will be more likely to teach sexuality education if their colleagues believe it should be done. (Table D-8, Appendix D).

The relationship between the school administration thinking sexuality education should be taught (Item 20) and doing what the school administration thinks should be done (Item 25) had a chi-square value of 12.64045, with 4 degrees of freedom. At 0.05 level of significance the critical value was 9.49. The hypothesis was therefore rejected. At a 0.01 level of significance the critical value was 13.28. At this level the null hypothesis could not be rejected (Table D-9, Appendix D). A rejection of the hypothesis at the 0.05 level indicated that teachers would be more willing to teach sexuality education if they believe the school administration wants it taught.

The relationship between the community thinking sexuality education should be taught (Item 21) and doing what the community thinks should be done (Item 26) had a chi-square value of 21.64991, with 4 degrees of freedom. At 0.05 level of significance the critical value was 9.49. The hypothesis was therefore rejected (Table D-10, Appendix D). The findings indicated that this group would be more willing to teach sexuality education if they believed that the community wanted sexuality education taught.

The rejection of the hypothesis indicated a significant relationship between perception of what others think should be done (i.e., "the school administration thinks I should teach sexuality education") and willingness to act on that behalf (i.e., "with respect to teaching sexuality education I want to do what the administration thinks I should do"). This finding must be interpreted cautiously, however, due to the high percentage of responses in the undecided and non-respondents category for comparison questions (Table 17). The

Table 17

Record of Undecided and Non-Respondents for Relationship Between Perception of Support and Willingness to Act on that Support (n = 194)

Question	Undecided N	Undecided %	Non-Respondents N	Non-Respondents %	Total N	Total %
Item 19	89	45.9	16	8.2	105	54.1
Item 20	94	48.5	19	9.8	113	58.3
Item 21	112	57.7	24	12.4	136	70.1
Item 25	66	34.0	11	5.7	77	39.7
Item 25	54	27.8	6	3.1	60	30.9
Item 26	62	32.0	7	3.6	69	35.6

indecisiveness indicated by the low response rate, ranging from 30.9% (Item 25) to 70.1% (Item 21) would suggest a lack of knowledge of the feelings of colleagues, school administration and the community about sexuality education or a low priority (importance) placed on these as influential in the decision-making process in the teaching of sexuality education.

Perception of Preparedness To Teach Sexuality Education

The third research question concerned home economics teachers' perception of preparedness to teach sexuality education. The percentage frequency distribution, the mean and the standard deviation for the subscale "Preparedness To Teach Sexuality Education" (Items 28-45) are presented in Table D-11 (Appendix D).

Those items, ranked as having a higher perception of preparedness according to their high mean value and a lower perception of preparedness according to their mean value are presented in Table 18 and Table 19. Those areas where home economics teachers felt better prepared generally concerned fetal development, pregnancy and female reproduction. Those areas reflecting a lower perception of preparedness generally concerned slang terms, abortion and sexual orientation and lifestyle.

The significance of the demographic variables of age, teacher education and years of teaching experience for the subscale "Preparedness To Teach Sexuality Education" (Items 28-45) were tested with the following hypothesis:

Table 18

Preparedness to Teach Sexuality Education:
Highest Ranked Items

Items	Rank	Mean	Standard Deviation
29. I am confident I could explain the factors affecting fetal development.	1	4.314	0.863
31. I feel adequately enough informed about the female reproduction system to order to teach the topic.	2	4.273	0.923
45. I am confident that I could explain the fertility cycle.	3	4.263	0.813
34. Health care during pregnancy is a topic I'm knowledgeable enough to teach.	4	4.237	0.805
33. I would feel comfortable talking about sexual behavior with adolescents.	5	3.918	1.030
40. I am confident that I could handle classroom humor related to sexuality.	6	3.902	0.936

Table 19

Preparedness to Teach Sexuality Education: Lowest Ranked Items

Items	Rank	Mean	Standard Deviation
44. I am confident I could respond comfortably when a student asks a question using a slang sexuality term.	13	3.753	0.955
43. I am familiar with most slang terms adolescents use to describe sexuality.	14	3.624	0.970
42. I feel comfortable enough with my knowledge of sexually transmitted diseases to teach the topic.	15	3.500	1.093
36.* Talking objectively about sexual lifestyles that differ from my own would be difficult.	16	3.361	1.089
30.* Explaining variations in sexual orientations or lifestyle would be difficult to do.	17	3.216	1.723
35. Medically induced abortion procedures is a topic I feel well enough informed about to teach.	18	2.887	1.168

* Reverse polarity values.

> There is no significant difference with regard to preparedness to teach sexuality education among the different categories of:
>
> a) age
> b) teacher education, and
> c) years of teaching experience.

One-way analysis of variance resulted in no significant difference at the 0.05 level of probability among the categories of age, teacher education and years of teaching experience. The null hypothesis was not rejected. The findings indicate that for this group, age, teacher education and years of teaching experience did not influence perception of preparedness to teach sexuality education. Descriptive statistics may be found in Tables D-12, D-13, and D-14 (Appendix D).

Teaching of Sexuality Education Concepts

The fourth research question concerned sexuality education concepts home economics teachers believe should be taught and the actual teaching of these concepts. The percentage frequency distribution, the mean and the standard deviation for Part II of the TSE Questionnaire are presented in Tables D-15 and Table D-16 (Appendix D).

Those concepts, home economics teachers believe should be taught, ranked according to their mean value are presented in Table 20. Generally those items ranked as more important dealt with interpersonal relationships, personal development and decision-making. Of the top ten, only "nutrition during pregnancy" and "drugs and alcohol using during pregnancy," ranked third and eighth, respectively, dealt with physiology. Those concepts ranked as least important, such as

Table 20

Ranking of Importance of "Should Teach" Sexuality Education Concepts

Sexuality Education Concepts	Rank	Mean	Standard Deviation
relationships	1	4.418	0.731
self concept	2	4.366	0.165
nutrition during pregnancy	3	4.314	1.018
accepting responsibility for behavior	4	4.289	1.101
value formation/clarification	5	4.278	1.108
decision-making	6	4.227	0.966
setting personal standards	7	4.211	1.059
drugs, alcohol and tobacco use during pregnancy	8	4.206	1.123
problem solving	9.5	4.165	0.984
communication	9.5	4.165	1.079
feelings/emotions	11	4.144	1.023
sexual values	12	4.098	0.974
sexual decision-making	13	4.088	1.076
love	14	4.077	1.072
sexually transmitted diseases	15	4.062	0.868
prenatal development	16	4.052	1.027
dating	17	4.026	1.020
community resources/agencies	18	4.010	1.053
conception	19	3.985	0.952
female reproduction	20.5	3.943	0.859
birth control	20.5	3.943	0.951
male reproduction	22	3.830	0.874
family planning	23	3.794	1.101
signs of pregnancy	24.5	3.773	1.092
sexual health	24.5	3.773	1.134

Table 20 (continued)

Sexuality Education Concepts	Rank	Mean	Standard Deviation
childbirth	26	3.722	1.103
menstruation	27	3.696	1.036
alcohol, drugs and sexual behavior	28	3.577	1.123
child sexual abuse	29	3.562	1.165
premarital sexual behavior	30	3.510	1.102
sex role stereotyping	31	3.402	1.035
sex role socialization	32	3.278	1.198
sexual lifestyles/sexual orientation	33	3.273	0.967
sexual assault/sex offenses	34	3.201	1.056
sexual harrassment	35	3.082	1.107
rape	36	3.072	1.060
abortion	37	3.062	0.974
miscarriage	38	3.057	1.088
intercourse	39	3.021	0.933
sex bias	40	3.000	0.992
incest	41	2.892	1.035
pornography	42	2.763	1.065
homosexuality	43	2.737	0.740
sexual response	44	2.716	1.076
masturbation	45	2.624	0.856

homosexuality, incest or abortion, are among the more controversial topic areas in sexuality education.

Sexuality education concepts home economics teachers are actually teaching ranked according to their mean value are presented in Table 21. Generally those concepts taught most frequently are related to development of interpersonal relationships and self-development or those which are strongly related to female growth and development such as prenatal development and nutrition, menstruation or female reproduction. Those concepts ranked lowest on the teaching scale are those which are of a somewhat controversial nature such as masturbation, homosexuality or pornography.

A comparison of ranking of the high importance and low importance granted to the belief in teaching sexuality education concepts and the actual teaching of these concepts is presented in Table 22 and Table 23. Of the top 11 ranked concepts which home economics teachers believe should be taught, eight concepts are actually being taught. The concepts which share the top values are: relationships, self-concept/esteem/self-awareness, nutrition during pregnancy, accepting responsibility for behavior, values formation/clarification, decision-making, communication and feelings/emotions. The bottom 11 ranked concepts in belief in teaching share a bottom placement in actual teaching with ten of these concepts. Miscarriage is the exception being ranked 40th in belief. The last five rankings: incest, pornography, homosexuality, sexual response and masturbation are in almost identical positions in belief and actual teaching. A consistency exists between the ratings of the belief that sexuality

Table 21

Ranking of Importance of Sexuality Education Concepts
Actually Taught

Sexuality Education Concepts	Rank	Mean	Standard Deviation
self-concept/esteem/self awareness	1	3.464	1.664
nutrition during pregnancy	2	3.335	1.717
values formation/clarification	3	3.320	1.648
accepting responsibility for behavior	4	3.309	1.669
feelings/emotions	5	3.299	1.588
decision-making	6	3.268	1.577
relationships	7.5	3.247	1.534
communication	7.5	3.247	1.613
menstruation	9	3.237	1.624
prenatal development	10	3.186	1.730
female reproduction	11	3.180	1.532
drugs, alcohol and tobacco use during pregnancy	12	3.113	1.736
problem solving	13	3.031	1.570
dating	14	3.021	1.580
love	15	2.948	1.615
setting personal standards	16	2.938	1.659
conception	17	2.933	1.645
childbirth	18	2.784	1.649
signs of pregnancy	19	2.773	1.657
sexual values	20	2.742	1.539
sexual decision-making	21	2.598	1.607
community resources/agencies	22	2.593	1.640
birth control/contraception	23	2.588	1.649
sexually transmitted diseases	24	2.536	1.558

Table 21 (continued)

Sexuality Education Concepts	Rank	Mean	Standard Deviation
family planning	25	2.474	1.645
sex role stereotyping	26	2.402	1.423
child sexual abuse	27	2.340	1.546
male reproduction	28	2.320	1.429
sex role socialization	29	2.249	1.400
alcohol, drugs and sexual behavior	30	2.227	1.541
sexual health	31.5	2.160	1.542
premarital sexual behavior	31.5	2.160	1.440
miscarriage	33.5	1.959	1.303
sexual lifestyles/sexual orientation	33.5	1.959	1.307
abortion	35	1.902	1.249
intercourse	36	1.897	1.183
sexual assault/sex offenses	37	1.794	1.255
rape	38	1.722	1.224
sex bias	39	1.716	1.220
sexual harrassment	40	1.634	1.185
incest	41	1.593	1.145
sexual response	42	1.567	1.076
homosexuality	43	1.485	0.988
pornography	44	1.392	0.988
masturbation	45	1.361	0.848

Table 22

Comparison of High Ranked "Should Teach" Concepts with Actual Teaching of Concepts

Sexuality Education Concepts	Belief in Teaching Ranking	Actual Teaching Ranking
relationships	1	7.5
self concept/esteem/self awareness	2	1
nutrition during pregnancy	3	2
accepting responsibility for behavior	4	4
values formation/clarification	5	3
decision-making	6	6
setting personal standards	7	16
drugs, alcohol and tobacco use during pregnancy	8	12
problem solving	9.5	13
communication	9.5	7.5
feelings/emotions	11	5
sexual values	12	20

Table 23

Comparison of Low Ranked "Should Teach" Concepts with Actual Teaching of Concepts

Sexuality Education Concepts	Belief in Teaching Ranking	Actual Teaching Ranking
sexual lifestyles/sexual orientation	33	33.5
sexual assault/sex offenses	34	37
sexual harrassment	35	40
rape	36	38
abortion	37	35
miscarriage	38	33.5
intercourse	39	36
sex bias	40	39
incest	41	41
pornography	42	44
homosexuality	43	43
sexual response	44	42
masturbation	45	45

education concepts should be taught and the actual teaching of these concepts for both high and low ranked items.

Eleven respondents added additional concepts to the list of sexuality education concepts. These included adoption, suicide, teenage marriage and parenting, and child and spousal abuse.

Chi-square was used to analyze the strength of the relationship between "should teach" and "actually teach" categories of the sexuality education concepts. The relationship was tested with the following hypothesis:

> Regarding the teaching of sexuality education concepts, there is no significant indication of relationship between the belief in teaching and the actual teaching of sexuality education concepts.

For chi-square to be of a level of significance to reject the hypothesis an expected cell frequency must be at least five (Norusis, 1983). When the chi-square test was performed to assess the significance of the relationship of the difference between pairs of means of "should teach" and "actually teach" concepts, there were too many empty cells to draw a conclusion. The hypothesis, therefore, cannot be rejected. However when the means for each of the 45 sexuality education concepts are represented graphically (Figure 2) for "Should Teach" and "Have Taught" concepts there is a definite indication of a relationship between the two. Exceptions to the relationship are visible for birth control (Item 9), sexually transmitted diseases (Item 10), rape (Item 16) and sexual health (Item 39). In these instances the belief in teaching does not parallel the

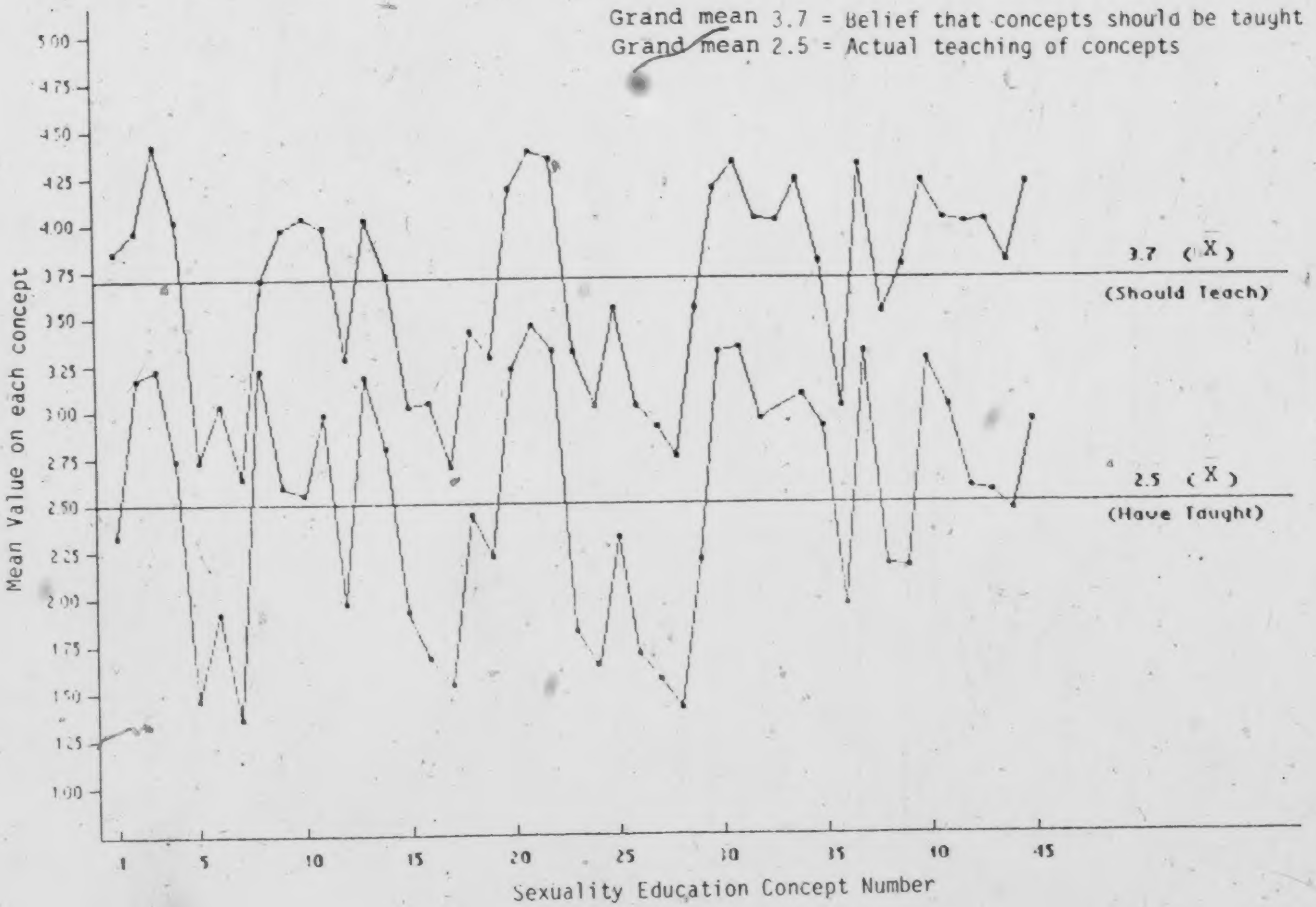

Figure 2

Comparison of Means of "Should Teach" and "Have Taught" Sexuality Education Concepts actual teaching of these concepts. Belief in teaching these concepts was actually higher in relation to the actual teaching when compared to the other sexuality education concepts. The correlation between belief in teaching and the actual teaching of sexuality education concepts was .40.

Area of Specialization and Teaching of Sexuality Education

The fifth research question concerned the area of specialization for home economics teachers, whether it be foods and nutrition, clothing and textiles, family and consumer studies or in the general area of home economics and the relationship between each one of those and attitude toward teaching sexuality education, willingness to teach sexuality education, perception of preparedness to teach sexuality education and belief in what sexuality education concepts should be taught and the actual teaching of these concepts. Because of multiple responses to areas of specialization (see Table 8) only those which indicated a single category of specialization were used for the purpose of analysis. The following null hypothesis was used to test this question.

There is no significant difference with regard to:

a) attitude toward teaching sexuality education
b) willingness to teach sexuality education
c) perception of preparedness to teach sexuality education
d) belief in what sexuality education concepts should be taught, and
e) actual teaching of these concepts

among the different categories of areas of specialization:

a) foods and nutrition
b) clothing and textiles
c) family study and/or consumer studies
d) general study of home economics.

One-way analysis of variance tests were performed for each of the areas of specialization and the subscales listed above. No significant difference was found at the 0.05 level of probability among the areas of specialization and attitude toward teaching sexuality education, belief in what sexuality education concepts should be taught and actual teaching of sexuality education concepts. The null hypothesis was not rejected and findings indicated that, for this group, area of specialization did not influence attitude toward teaching sexuality education, belief in what sexuality education concepts should be taught and actual teaching of these concepts. Descriptive statistics may be seen in Tables D-17, D-18 and D-19 (Appendix D).

A significant difference was found, by one-way analysis of variance, among the different categories of area of specialization and perception of preparedness to teach sexuality education (F = 3.5438, Table 24); and willingness to teach sexuality education (F = 3.2320, Table 25). A Scheffé test identified the significantly different means for perception of preparedness to teach as those teachers who specialized in clothing and textiles (Mean = 59.9333) and family studies and/or consumer studies (Mean = 74.333) (Table 26). The null hypothesis was rejected, at the 0.05 level of probability, indicating that those teachers whose area of specialization was family or consumer studies felt more prepared to teach sexuality education than those teachers whose area of specialization was clothing and textiles.

Table 24

Analysis of Variance of Perception of Preparedness to Teach Sexuality Education for Respondents in Different Categories of Area of Specialization

Source	Sum of Squares	Mean Square	Degree of Freedom	F
Between Groups	1401.7885	467.2628	3	3.5438*
Within Groups	18855.2047	131.8546	143	
Total	20256.9932			

* Significant at $p < .05$

Table 25

Analysis of Variance of Willingness to Teach Sexuality Education for Respondents in Different Categories of Area of Specialization

Source	Sum of Squares	Mean Square	Degree of Freedom	F
Between Groups	78.2411	26.0804	3	3.2320*
Within Groups	1153.9357	8.0695	143	
Total	1232.1769			

* Significant at $p < .05$

Table 26

Means and Standard Deviations for Area of Specialization Categories on Perception of Preparedness to Teach Sexuality Education (n = 147)

	N	%	Mean	Standard Deviation
Group 1 (foods and nutrition)	13	8.8	62.7692	11.0917
Group 2 (clothing and textiles)	15	10.2	59.9333	12.1741
Group 3 (family and consumer studies)	9	6.1	74.3333	8.2462
Group 4 (general study of home economics)	110	74.8	66.9818	11.6367

However, a Scheffé test to identify the significant means for willingness to teach sexuality education found that no two groups were statistically different at the 0.05 level of probability (Table 27). The probability level reported by one-way analysis of variance (p = .0243) for willingness to teach sexuality education did not allow prediction at any level of confidence which groups between the categories of area of specialization were significant in influencing willingness to teach. The null hypothesis was rejected, at a 0.05 level of probability, indicating that willingness to teach was influenced by area of specialization.

Concerns, Difficulties and Issues in Sexuality Education

The open-ended questions served to allow the respondents to reflect in an unstructured way on their experience with sexuality education. Comments ranged from two words to paragraphs and from very personal observations to theory based responses. The question responses were tabulated and categories created for key themes (Atkins, 1984).

There was a 60% (n = 117) response rate to the question "What difficulties, if any, have you experienced while teaching various aspects of human sexuality?" The key themes identified and their frequency of responses are presented in Table 28. Support for programs from the community, school administrations and parents was seen as a prime difficulty with availability of any or especially unbiased resource material and speakers another concern. Concern about the students, their immaturity, their misinformation or embarrassment and how to present the course dealing with sensitive issues and values was

Table 27

Means and Standard Deviations for Area of Specialization Categories on Willingness to Teach Sexuality Education (n = 147)

	N	%	Mean	Standard Deviation
Group 1 (foods and nutrition)	13	8.8	9.8462	3.1582
Group 2 (clothing and textiles)	15	10.2	10.0000	3.1396
Group 3 (family and consumer studies)	9	6.1	12.8889	2.3154
Group 4 (general study of home economics)	110	74.8	11.4636	2.7980

Table 28

Key Themes Identified for Difficulty Experienced in Teaching Sexuality Education

Theme (n = 117)	Frequency	Percent
Support for program	25	21.3
Resource material/references; people	18	15.3
No difficulties	15	12.7
Dealing with issues/values	11	9.4
Immaturity of students	8	6.8
Tension in co-ed classes	8	6.8
Not enough teaching or preparation time/ class size	8	6.8
No set curriculum/boundaries	7	5.9
Embarrassment of students	5	4.1
Not comfortable/knowledgeable/experienced to teach	3	1.7
* Other	6	5.1

* Other included topics such as lack of parental contact, keeping up with medical advances, religious groups, and male sexuality.

expressed by many teachers. Examples of typical comments to this included included:

> "mostly frustration, when I find how little my 'sexually active' students know"
>
> "greatest problem would be community and administration support"
>
> "hard to teach without passing on your values"
>
> "people seem afraid to talk about values or morals in connection with this. Personally I find it difficult to separate the two"
>
> "none, quite enjoyed teaching it"
>
> "most of my teaching is done informally - guiding students with personal problems"
>
> "pressure from administration - constant scruting (sic)"
>
> "worry of teaching birth control methods and students changing your wording making it sound as though you are telling them to use"
>
> "difficult to deal with comments that indicate an irresponsible or immoral attitude"
>
> "embarrassment on part of students"

The second question "Is there anything you would like to say about sexuality education (i.e., need for, training for, issues, concerns, or other aspects)?" elicited a 56% (n = 108) response rate. The key themes identified and their responses are presented in Table 29. Some multiple responses by individuals led to a higher frequency of response concerns than respondents.

The need for well-educated, knowledgeable teachers who are mature and comfortable with sexuality education was reflected in the high response (43.5%) to need for training. The philosophy, or underlying basis or value stance for a sexuality education course was a dilemma

Table 29

Key Themes Identified for Comments About Sexuality Education

Theme (n = 124)	Frequency	Percent
Need for adequate training	54	43.5
Philosophy of course	15	12.1
Tolerance/sensitivity of teachers	15	12.1
Need of course for students	14	11.3
Course curriculum necessary	6	4.8
Co-educational classes an issue	6	4.8
Unwilling teacher shouldn't be compelled to teach	6	4.8
Parent involvement in course	4	3.2
Parent should be teacher	2	1.6
Lack of resources	2	1.6

faced by many responding teachers. Recognition for the need for a sexuality education course for students and a curriculum from which to teach was another concern. Examples of typical responses to this question included:

> "poor teaching is worse than no teaching . . . no token teaching"
>
> "moral values must be an issue"
>
> "teacher must pass on facts, not personal values"
>
> "I would not be happy if my children were taught that abortion was an acceptable method of birth control. I feel that values such as these may be passed on by some teachers"
>
> "teacher must be comfortable teaching this area, well informed, respected by community"
>
> "the need for sexuality education is great"
>
> "teacher should want to teach the subject"
>
> "I believe it is an integral part of the education of any child and school definitely has a part to play in combination with the family and the community"
>
> "I would gladly attend more workshops and conferences re various aspects of sexuality"
>
> "not all home ec. teachers can handle the sensitivity of the topics. It is definitely not a course that can be taught by anyone"

The answers to the open-ended questions reflected the concerns of this group of teachers. A recurring theme in both answers was the dilemma over values, as either a basis for the course or the value stance to take or not to take in discussing issues, like sexual activity or birth control, the most mentioned topics. The indication from a majority was that they were prepared to take in-services or courses to become a sensitive, knowledgeable teacher of the subject.

In response to a question about helpful courses which had increased their knowledge of sexuality education, 100 Nova Scotia home economics teachers suggested: the family life institutes sponsored by local universities; anatomy, biology, psychology and child studies courses; human sexuality and human relations courses; and conferences offered by Planned Parenthood.

Summary of Results

The majority of Nova Scotia home economics teachers (95.4%) reported a positive attitude toward sexuality education and 80.4% would be willing to teach sexuality education if given the opportunity. Neither age, previous education, nor years of teaching experience was significant in terms of attitudes toward sexuality education or perception of preparedness to teach. However, school size and grade level taught had a significant effect on attitude toward teaching sexuality education. Teachers in the larger schools (over 1,000 students) showed a higher mean score (38.8824) than did teachers in schools of 500 - 1,000 students (36.3333). Those teaching senior high showed a higher mean score (39.4000) than did those teaching junior high (37.0240). Willingness to teach sexuality education was not significant in terms of age, years of teaching experience and school size. However, teacher education and grade level taught had a significant effect on willingness to teach. Home economics teachers who believe that others, such as the administration, the community or their colleagues, think an act should be performed (i.e., teaching sexuality education) are willing to act on that belief.

There is a relationship between sexuality education concepts home economics teachers believe should be taught and those they actually teach. Concepts dealing with interpersonal relationships and decision-making were rated higher while those dealing with controversial issues received a lower placement in both the "should teach" and "actually teach" areas. The importance of education for sexuality education and the dilemma of values in sexuality education concern many teachers.

CHAPTER V

Discussion of Research Findings

Introduction

The discussion of the research focuses on comparisons with findings of other studies, significance within the conceptual framework of Fishbein and Ajzen, and relevant new findings. More specifically attitudes toward sexuality education, perception of preparedness to teach sexuality education, willingness to teach sexuality education, reaction to the teaching of specific sexuality education concepts and effect of area of specialization on the teaching of sexuality education are discussed.

Outline of Results

All 253 home economics teachers within 22 district school boards in Nova Scotia were surveyed regarding their attitudes towards sexuality education during the fall of 1986. Of the 194 responses (77.29%) to the Teaching Sexuality Education in Nova Scotia Questionnaire (TSE Questionnaire), 95.4% reported a favorable attitude toward the teaching of sexuality education. Although 80.4% of home economics teachers would be willing to teach sexuality education if given the opportunity, only 64.4% felt personally ready to teach sexuality education. Teaching sexuality education in the school was favored by 93.3% of respondents, while 76.3% would include it in the home economics curriculum and 59.8% in the health curriculum. Only 65.9% reported a school administrator supportive of sexuality education and 60.8%